



10/689,309

# STIC Search Report

EIC 2100

STIC Database Tracking Number: 141392

**TO: Todd Ingberg**  
**Location: 5D09**  
**Art Unit: 2124**  
**Tuesday, January 04, 2005**

**Case Serial Number: 10/689309**

**From: Anne Hendrickson**  
**Location: EIC 2100**  
**RND 4B28**  
**Phone: 571-272-3490**

**Anne.Hendrickson@uspto.gov**

## Search Notes

Todd – Attached is an NPL Search on the above referenced case. I tagged some references that I thought might be of particular interest. I came up with articles on a few products that I thought could be relevant, but the press releases did not meet your date. I went ahead and searched the manufacturers of these products in the patent databases just to see if they had filed for a patent, but came up with nothing. I also did an extensive search on the authors and on Bitfone. Make sure you take a look at all of the references, not just the ones that I tagged, as you may see something that you can use. Please let me know if you have any questions or would like for me to refocus the search.

Anne

## SEARCH REQUEST FORM

Scientific and Technical Information Center

110

Requester's Full Name: Todd Ingberg Examiner #: 75084 Date: 12/28/04  
 Art Unit: 2124 Phone Number 302-3723 Serial Number: 1016491309  
 Mail Box and Bldg/Room Location: BAN 5009 Results Format Preferred (circle): PAPER DISK E-MAIL  
 OR

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See sheet provided

Inventors (please provide full names): \_\_\_\_\_

Rao, Bindu Rama

Earliest Priority Filing Date: 10/19/03

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

I need a reference showing updating SOFTWARE  
 Using a Synchronized Markup Language (SYN CML, DM).  
 I have found updating data but not software.  
 updating data does not provide sufficient motivation  
 to write a rejection. Pre grant pub print out  
 provided.  
 Also, please focus on prior work of inventor.

## STAFF USE ONLY

## Type of Search

## Vendors and cost where applicable

Searcher: Anne Herlihy NA Sequence (#) \_\_\_\_\_ STN \_\_\_\_\_  
 Searcher Phone #: 2-3490 AA Sequence (#) \_\_\_\_\_ Dialog ✓  
 Searcher Location: \_\_\_\_\_ Structure (#) \_\_\_\_\_ Questel/Orbit \_\_\_\_\_  
 Date Searcher Picked Up: 1/3/05 Bibliographic \_\_\_\_\_ Dr. Link \_\_\_\_\_  
 Date Completed: 1/4/05 Litigation \_\_\_\_\_ Lexis/Nexis \_\_\_\_\_  
 Searcher Prep & Review Time: 30 Fulltext \_\_\_\_\_ Sequence Systems \_\_\_\_\_  
 Clerical Prep Time: \_\_\_\_\_ Patent Family \_\_\_\_\_ WWW/Internet ✓  
 Online Time: 171 Other \_\_\_\_\_ Other (specify) \_\_\_\_\_

?ds

Set	Items	Description
S1	173	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE) () (DM OR DEVICE()MA- NAGE?)
S2	8550074	SOFTWARE OR FIRMWARE OR SOFT()WARE OR FIRM()WARE OR COMPUT- ER (1W) PROGRAM? OR COMPUTER () READABLE() (MEDIA OR MEDIUM) OR DEVICE() DRIVER?
S3	25061154	UPDATE? ? OR UPDATING OR UP(1W)DATE OR MODIFY? OR MODIFI? - OR ADD??? OR CHANG???
S4	78	S1 AND S2(5N)S3
S5	21	RD (unique items)
S6	10152	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)
S7	299	S6 AND S2(3N)S3
S8	143	RD (unique items)
S9	51	S8 NOT PY>2002
S10	50	S9 NOT S5

?show files

File 15:ABI/Inform(R) 1971-2005/Jan 01  
(c) 2005 ProQuest Info&Learning

File 9:Business & Industry(R) Jul/1994-2005/Jan 03  
(c) 2005 The Gale Group

File 610:Business Wire 1999-2005/Jan 03  
(c) 2005 Business Wire.

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

File 275:Gale Group Computer DB(TM) 1983-2005/Jan 04  
(c) 2005 The Gale Group

File 476:Financial Times Fulltext 1982-2005/Jan 04  
(c) 2005 Financial Times Ltd

File 624:McGraw-Hill Publications 1985-2004/Dec 28  
(c) 2004 McGraw-Hill Co. Inc

File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jan 04  
(c) 2005 The Gale Group

File 636:Gale Group Newsletter DB(TM) 1987-2005/Jan 04  
(c) 2005 The Gale Group

File 613:PR Newswire 1999-2005/Jan 03  
(c) 2005 PR Newswire Association Inc

File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc

File 16:Gale Group PROMT(R) 1990-2005/Jan 04  
(c) 2005 The Gale Group

File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 634:San Jose Mercury Jun 1985-2004/Dec 31  
(c) 2005 San Jose Mercury News

File 148:Gale Group Trade & Industry DB 1976-2004/Jan 03  
(c) 2004 The Gale Group

File 20:Dialog Global Reporter 1997-2005/Jan 03  
(c) 2005 The Dialog Corp.

File 696:DIALOG Telecom. Newsletters 1995-2005/Jan 03  
(c) 2005 The Dialog Corp.

File 647:CMP Computer Fulltext 1988-2005/Dec W3  
(c) 2005 CMP Media, LLC

File 674:Computer News Fulltext 1989-2004/Dec W2  
(c) 2004 IDG Communications

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?t' s5/3,k/6,7,9,10,13,14,15,19

5/3,K/6 (Item 6 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

0001176485 I739BFF40231C11D9AA29D17BEF8F214C (USE FORMAT 7 FOR FULLTEXT)  
**Insignia Raises Over \$2.3 Million in Working Capital**  
Business Wire  
Tuesday, October 19, 2004 T00:23:00Z  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 943

...operators. SSP v2 enables operators to remotely configure mobile data services as well as send **firmware updates** over-the-air (OTA) based on a variety of mobile management services, all using a single, open standards system that works with any **Open Mobile Alliance Device Management (OMA - DM)** compatible phone.

"Our investors have exercised a vote of confidence in Insignia's technology and...

5/3,K/7 (Item 7 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

0001171224 I979440001D1E11D99D32CFC4DF44DAEC (USE FORMAT 7 FOR FULLTEXT)  
**InnoPath Announces Dedicated Team for OMA Standards; Company Demonstrates Leadership in Enabling Interoperability for Handset Users**  
Business Wire  
Wednesday, October 13, 2004 T13:30:00Z  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 444

InnoPath has been an early supporter of OMA and is a full member of **OMA Device Management** Working Group. InnoPath's proactive steps and leadership role in enabling interoperability will allow wireless...

...us to develop and deliver OMA-compliant OTA capabilities for the fastest and most efficient, **update-ready software updates** for mobile handsets."

OMA is currently in the process of reviewing proposed technical specifications for...

...enabling better personalization. InnoPath is the only over-the-air mobile device management company actively **updating** handset **software** in commercial deployments. Its flagship product, DeltaUpgrade Plus(TM), helps wireless operators and handset manufacturers...

5/3,K/9 (Item 9 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

0001162724 I5CA59B40113B11D9B8A6D3D762AFE2D3 (USE FORMAT 7 FOR FULLTEXT)  
**Insignia Drives Mobile Device Management Interoperability; Launches Device Management Interoperability Lab**  
Business Wire  
Tuesday, September 28, 2004 T10:30:00Z  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 826

TEXT:

...its Device Management Interoperability Lab (DMIL) at Company headquarters. Insignia's DMIL is now executing **Open Mobile Alliance Device Management (OMA - DM)** interop testing with a wide range of phone manufacturers and other mobile device management technology...

...operators. SSP v2 enables operators to remotely configure mobile data services as well as send **firmware updates** over-the-air based on a variety of mobile management services, all using a single, open standards system that works with any **OMA - DM** compatible phone. Insignia recently announced that New World Mobility, a prominent Hong Kong mobile operator...

...mission is to foster the worldwide development, implementation and use of over-the-air (OTA) **software updates** for mobile devices. Insignia began working with the OTA Flash Forum several months ago specifically...

...true interoperability and significant return on investment."

Insignia is also and active member of the **Open Mobile Alliance Device Management (OMA - DM)** working group, the OSGi Mobile Expert Group, and is an Executive Committee member of the...

5/3,K/10 (Item 10 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

0001159160 I8C1DA2100BC711D9BCA4B21422374A2E (USE FORMAT 7 FOR FULLTEXT)  
**mFormation Adds OMA DM Over-the-Air Firmware Update Management -FOTA- Capabilities to its mFormation SERVICE MANAGER Suite**  
Business Wire  
Tuesday, September 21, 2004 T12:00:00Z  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 517

**mFormation Adds OMA DM Over-the-Air Firmware Update Management -FOTA- Capabilities to its mFormation SERVICE MANAGER Suite**

TEXT:

...TM) Suite Now Provides the Most Comprehensive Standards-Based Support for Wireless Device Management, Including **Firmware Updates**

mFormation Technologies Inc. (<http://www.mformation.com>), the leading provider of comprehensive wireless device and...

...Air Firmware Management (FOTA) to its mFormation SERVICE MANAGER(TM) suite, in full compliance with **Open Mobile Alliance Device Management (OMA DM)** standards.

...Richardson, Texas, USA. The test, conducted by OMA, established interoperability between the mFormation server and **OMA DM** clients from several major wireless data device and service vendors. The majority of phones to be shipped in future are expected to be **OMA DM** compliant.

mFormation SERVICE MANAGER is a comprehensive suite of software products that provides over-the-air configuration of wireless device and service settings, remote device diagnostics, and **software and firmware updates**. With FOTA support, the product can be used by mobile operators to support **firmware updates** independently of the vendor providing them.

"Network operators are realizing that they need to manage...

...solution, complete with the automation, scheduling, diagnostics and security necessary to meet the challenge of **firmware updating** with a superior managed solution. mFormation is not encumbered with our own competing **update** technology for generating the **firmware** deltas, and can therefore support all the firmware vendors in the industry," said Mark Edwards...

...service management software provides real-time visibility into device and data service performance, device diagnostics, **software** and **firmware updates**, device and service configuration capabilities, and a portal for enterprise customer self-management.

mFormation's software manages a broad mix of wireless devices, including **OMA DM** compliant cell phones, Symbian OS-based devices, Microsoft (NASDAQ: MSFT) Pocket PC-based handhelds and...

5/3,K/13 (Item 13 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

00988852 20031110314B8307 (USE FORMAT 7 FOR FULLTEXT)  
**Insignia Accelerates Over-The-Air Firmware Adoption Through Royalty-Free Open Mobile Alliance Download Compliant Software-Will Include OMA DL 2.0 Implementation to Spur Industry Standardization and Acceleration of Firmware Over-The-Air Technologies**  
Business Wire  
Monday, November 10, 2003 06:01 EST  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 655

TEXT:

...DL 2.0 specification, which is expected in 2004. Insignia has been active in the **OMA Device Management** working group to standardize elements of firmware over-the-air technology in order to accelerate...

...Secure  
System Provisioning (SSP) server software infrastructure product. Insignia SSP provides an end-to-end **firmware update** system for mobile operators and phone manufacturers. SSP reduces bottom line software recall costs by...

5/3,K/14 (Item 14 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

00653469 20020125025B6718 (USE FORMAT 7 FOR FULLTEXT)  
**Starfish Announces Device Management Support; Leader in Mobility Management Solutions for Wireless to Add SyncML DM to Its Data Mobility Infrastructure**  
Business Wire  
Friday, January 25, 2002 13:29 EST  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 340

**Starfish Announces Device Management Support; Leader in Mobility Management Solutions for Wireless to Add SyncML DM to Its Data Mobility Infrastructure**

TEXT:

...to-end managed mobility solutions for the wireless Internet, announced it will support the new **SyncML Device Management** ( **SyncML DM** ) specification within its end-to-end data mobility infrastructure.  
The **SyncML DM** protocol will be an open, universal industry standard for remote device management of networked devices...

...an economical way to remotely add and

adjust services to the phones on their networks. **SyncML DM** gives them a common interface to access a whole range of configurable parameters," said Tom...

...development. "Device manufacturers are pushing for DM solutions to allow them to remotely and securely **update** device **firmware**, while differentiating themselves with OTA delivery of wireless applications. Device management facilitate those objectives for...

...and OEM customers via its TrueSync platform. Starfish will demonstrate its support for the new **SyncML DM** specification at the 2002 SyncML Congress in Amsterdam later this month.

"The SyncML Initiative is pleased to have companies like Starfish adopt the **SyncML DM** specification," said Douglas Heintzman, chairman of the SyncML Initiative. "Widespread adoption of the **SyncML DM** open standard will drive significant ROI gains for wireless carriers and device manufacturers."

According to...

5/3,K/15 (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2005 The Gale Group. All rts. reserv.

03570024 Supplier Number: 109984145 (USE FORMAT 7 FOR FULLTEXT)  
**Insignia Accelerates Over-The-Air Firmware Adoption Through Royalty-Free Open Mobile Alliance Download Compliant Software.**  
Business Wire, p5285  
Nov 10, 2003  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 659

... DL 2.0 specification, which is expected in 2004. Insignia has been active in the **OMA Device Management** working group to standardize elements of firmware over-the-air technology in order to accelerate...

...Secure System Provisioning (SSP) server software infrastructure product. Insignia SSP provides an end-to-end **firmware update** system for mobile operators and phone manufacturers. SSP reduces bottom line software recall costs by...

5/3,K/19 (Item 2 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

38406980 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**InnoPath Forms Dedicated Team for OMA Standards**  
WIRELESS NEWS  
October 14, 2004  
JOURNAL CODE: WIRN LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 171

(USE FORMAT 7 OR 9 FOR FULLTEXT)

InnoPath has been an early supporter of OMA and is a full member of **OMA Device Management** Working Group. As part of its OMA standards initiatives, InnoPath said a global wireless operator...

...us to develop and deliver OMA-compliant OTA capabilities for the fastest and most efficient, **update -ready software updates** for mobile

.. h ndsets."  
((Comments on this story may be sent to newsdesk@10meters.com))  
((Distributed...  
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?t s10/3,k/8,21,22,43,40,47

10/3,K/8 (Item 1 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

00667501 20020220051B4045 (USE FORMAT 7 FOR FULLTEXT)  
**Six Nokia Venture Partners Funded Companies Report Milestones at 3GSM World Congress**  
Business Wire  
Wednesday, February 20, 2002 03:42 EST  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 725

...mProve solution, the  
world's first carrier-grade software infrastructure for delivering  
over-the-air **firmware** and **software updates** to mobile phones.

Enition, provider of the innovative, secure and scalable Internet  
Monetization  
Platform, which...

...announces the expansion of its award-winning sync platform to include  
Over-the-Air (OTA) **SyncML** -based solutions. fusionOne's new OTA Sync  
Solutions  
enable carriers to offer their subscribers the ability to wirelessly sync  
**SyncML** handsets and PDAs with PIM and network applications.

WaveMarket, provider of a breakthrough spatio-temporal...

10/3,K/21 (Item 2 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2005 The Gale Group. All rts. reserv.

02749691 Supplier Number: 67626317 (USE FORMAT 7 FOR FULLTEXT)  
**Java Application Database and Synchronization Leader to Offer More Robust Mobile Platform to Customers.**  
Business Wire, p2013  
Dec 6, 2000  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 510

... WIRE)--Dec. 6, 2000  
PointBase to deliver its UniSync(TM) technology  
equipped with built-in **SyncML**  
PointBase, Inc., the leading provider of Java Application Database  
infrastructure software and synchronization solutions for...

...an aggressive new strategy to deliver its UniSync technology (universal  
synchronization) equipped with built-in **SyncML** technology to device  
manufacturers, Java application developers, Internet companies and wireless  
carriers who want to deploy **SyncML** -compliant products and services as  
early as Q2, 2001.

This new solution will give users local and remote data  
synchronization among **SyncML** -compliant products and services --  
regardless of platform or manufacturer.

"Our current version of UniSync is...

...information among multiple clients and servers can create standards  
compliant synchronization capabilities within their applications."

**SyncML** extends the UniSync commitment to include complete  
end-to-end personal information management solutions by coupling the  
increased interoperability among all **SyncML** -enabled products and services  
with PointBase's UniSync hub and spoke or multi-point synchronization  
infrastructure **software** . PointBase will add **SyncML** technology to

selected implementations of its UniSync API (application programming interface), as well as provide professional services to its partners to quickly implement the **SyncML** specification, due to be released in late December. By including **SyncML** technology in UniSync, users will be able to share data among an even broader range of **SyncML** -compliant devices, applications and services.

About PointBase UniSync

UniSync: Universal Database Synchronization

PointBase UniSync provides...

10/3,K/22 (Item 3 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

(c) 2005 The Gale Group. All rts. reserv.

02666002 Supplier Number: 65639246 (USE FORMAT 7 FOR FULLTEXT)

**PROKSIM SOFTWARE INC.**

PR Newswire, p8492

Oct 2, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 562

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

PROKSIM SOFTWARE INC. ANNOUNCES SUPPORT FOR **SYNCML** , THE WORLD'S FIRST UNIVERSAL STANDARD FOR DATA SYNCHRONISATION

... Newswire, London, October, 2. This press release is transmitted on behalf of Proxim Software Inc.

**SyncML** gains momentum as Proksim Software, maker of network-savvy application transport layer, joins initiative.

Dublin...

...Inc., a developer of bandwidth-smart network infrastructure software, today announced that it has joined **SyncML** as a supporter. **SyncML** is the industry initiative founded to develop the world's first true universal standard for...

...companies like Proksim Software as we drive this initiative," says Ilari Nurmi, Vice Chairman of **SyncML** , and a representative of Nokia. "We are very happy to add Proksim Software to the growing number of **SyncML** supporters."

Proksim shares a philosophy and goal with its fellow supporters of **SyncML** , and that is to promote and develop an industry standard that will enable data synchronisation across multiple devices and networks. **SyncML** -compliant devices will be seamlessly interoperable, providing synchronisation across servers, personal computers, wireless devices, laptops, and handhelds, regardless of platform or manufacturer. Proksim demonstrated its technology at the recent **SyncML** Summit held this past week in Dublin, Ireland.

About Proksim Software

Proksim develops networking technology...

...based in Austin, Texas. More information can be found at

<http://www.proksim.com>

About **SyncML**

Founded by Ericsson, IBM, Lotus, Motorola, Nokia, Palm, Inc., Psion and Starfish Software, the **SyncML** Initiative develops and promotes an open industry specification for universal data synchronisation of remote data and personal information across multiple networks, platforms and devices. The **SyncML** Initiative is open for participation to a wide range of industries including device manufacturers, synchronisation vendors, service providers and application developers. Companies interested in joining are encouraged to contact the **SyncML** Initiative today to become part of the team and deliver the **SyncML** specification available later this year. For more information on the **SyncML** Initiative, how to join **SyncML** , details of technical specifications and more, visit <http://www.syncml.org>

Ericsson (NASDAQ:ERICY), Jan Ahrenbring, Ericsson Mobile Communications AB, +46 70 590 9900, jan...  
COMPANY NAMES: \*Ericsson Mobile Communications AB; **SyncML**

10/3,K/43 (Item 9 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

21355783 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**NOKIA: Six Nokia Venture Partners Funded companies report milestones at 3GSM World Congress**  
M2 PRESSWIRE  
February 20, 2002  
JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 745

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... mProve solution, the world's first carrier-grade software infrastructure for delivering over-the-air **firmware** and **software updates** to mobile phones.

Enition, provider of the innovative, secure and scalable Internet Monetization Platform, which...

... announces the expansion of its award-winning sync platform to include Over-the-Air (OTA) **SyncML** -based solutions. fusionOne's new OTA Sync Solutions enable carriers to offer their subscribers the ability to wirelessly sync **SyncML** handsets and PDAs with PIM and network applications.

WaveMarket, provider of a breakthrough spatio-temporal...

10/3,K/40 (Item 6 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
(c) 2005 The Dialog Corp. All rts. reserv.

25144309 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Special Report - Mobile administration - Don't let mobile devices slip beyond your control.**  
COMPUTING, p45  
September 26, 2002  
JOURNAL CODE: WCOM LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 2017

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... and-miss approach is useless if you want to ensure that all mobile users are **up -to- date** with anti-virus **software**, applications and software licences.

It can be hard enough to control the software on PCs...

...effective mobile management strategy,' he says. 'As with desktops, these devices need to have regular **software updates**, backups and virus checks. Because time is of the essence in today's competitive marketplace ... of rapid evolution, and upgrade cycles are short. New standards are being introduced: for example, **SyncML** and WAP 2.0 will both bring new possibilities for device management. It's getting...

10/3,K/47 (Item 13 from file: 20)  
DIALOG(R)File 20:Dialog Global Reporter  
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13105844 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**(PR) Proksim Software Inc. Announces Support For SyncML , The World's First Universal Standard For Data Synchronization**  
PR NEWSWIRE

October 02, 2000

JOURNAL CODE: WPRW LANGUAGE: English RECORD TYPE: FULLTEXT  
WORD COUNT: 515

(USE FORMAT 7 OR 9 FOR FULLTEXT)

**(PR) Proksim Software Inc. Announces Support For SyncML , The World's  
First Universal Standard For Data Synchronization**

**SyncML** gains momentum as Proksim Software, maker of network-savvy application transport layer, joins initiative.

DUBLIN...

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About Proksim Software

Proksim develops networking technology...

... information: Proksim Software Corp. Jane Byrd +1 (512) 493 5764  
jbyrd(at)proksim.com. About **SyncML**

Founded by Ericsson, IBM, Lotus, Motorola, Nokia, Palm, Inc., Psion and Starfish Software, the **SyncML** Initiative develops and promotes an open industry specification for universal data synchronization of remote data and personal information across multiple networks, platforms and devices. The **SyncML** Initiative is open for participation to a wide range of industries including device manufacturers, synchronization vendors, service providers and application developers. Companies interested in joining are encouraged to contact the **SyncML** Initiative today to become part of the team and deliver the **SyncML** specification available later this year. For more information on the **SyncML** Initiative, how to join **SyncML** , details of technical specifications and more, visit <http://www.syncml.org>. SOURCE Proksim Software Inc.

/CONTACT: Ericsson (NASDAQ:ERIC), Jan Ahrenbring, Ericsson Mobile Communications AB...

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10/9/8 (Item 1 from file: 610)  
DIALOG(R)File 610:Business Wire  
(c) 2005 Business Wire. All rts. reserv.

00667501 20020220051B4045 (THIS IS THE FULLTEXT)  
**Six Nokia Venture Partners Funded Companies Report Milestones at 3GSM World Congress**  
Business Wire  
Wednesday, February 20, 2002 03:42 EST  
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT  
DOCUMENT TYPE: NEWSWIRE  
WORD COUNT: 725

TEXT:  
CANNES, France, Feb 20, 2002 (BUSINESS WIRE) - Nokia Venture Partners (www.nokiaventurepartners.com), a leading global venture capital firm focused on early-stage mobile technology companies, today gathered six of its portfolio companies to report on their latest developments at the 3GSM World Congress in Cannes.

At the event, Avesair, Avian Communications, Bitfone, Enition, fusionOne and WaveMarket will unveil their latest milestones, products and new features for the first time at a press event hosted by managing partner John Malloy. The event highlighted some of the most promising mobile technology companies and serves as the platform for these announcements and provides the philosophy behind Nokia Venture Partners' investment.

"We are very pleased to have such a presence in Cannes and are exceptionally excited by our recent investments. The 3GSM World Congress offers us the perfect vehicle to showcase the companies and reveal the products that will continue to change and enhance our mobile world," said John Malloy, managing partner, Nokia Venture Partners. "We are very proud of these entrepreneurs and hope that their efforts inspire and encourage more innovation by other emerging businesses."

Nokia Venture Partners was formed in 1998 as an independent venture firm investing in leading edge mobile technology companies targeting high growth market opportunities, such as mobile and IP network and software infrastructure. Nokia Venture Partners maintains USD \$650 million under management and has funded more than 30 companies within the mobile infrastructure hardware and software, applications and services sectors, from the US, the UK, Germany and Finland. The companies participating in the 3GSM World Congress make up only a portion of the \$650 million fund.

The Nokia Venture Partners portfolio companies participating in this year's event will make the following announcements:

Avesair, the only single-source mobile marketing and commerce provider, enabling operators, marketers and content providers to deliver and monetize a full range of targeting and decision-based services discusses its recently announced acquisition of WindWire making them the leading provider for all mobile marketing needs. By combining the resources and expertise of these two companies, Avesair emerges as the only end to end solution to implement successful mobile marketing programs.

Avian Communications unveils the company and its first mobile data

infrastructure solution, the Avian MSSP(TM) (Mobile Services Switching Point),. The Avian MSSP(TM) enables the definition and deployment of network based wireless data services, creating new revenue streams for operators, through the use of real-time value based billing models.

Bitfone Corporation, provider of innovative software solutions that enables carriers and mobile phone manufacturers to reduce costs and increase revenue

by enhancing the user experience, introduces its new mProve solution, the world's first carrier-grade software infrastructure for delivering over-the-air **firmware** and **software updates** to mobile phones.



Assignee

Enition, provider of the innovative, secure and scalable Internet Monetization

Platform, which enables the valuation, scale and settlement of content among

business partners reveals the 2.1 release of its flagship NetToll product.

fusionOne, a leader in carrier-class mobility and synchronization software, announces the expansion of its award-winning sync platform to include Over-the-Air (OTA) **SyncML** -based solutions. fusionOne's new OTA Sync Solutions

enable carriers to offer their subscribers the ability to wirelessly sync **SyncML** handsets and PDAs with PIM and network applications.

WaveMarket, provider of a breakthrough spatio-temporal (location-time) database custom built for location-based services, reveals its first round of

venture funding for the company and announces its Wave IQ software that significantly outperforms existing GIS and relational databases.

To register for press credentials for the 3GSM World Congress, please go to [www.3gsmworldcongress.com/press](http://www.3gsmworldcongress.com/press). For more information about Nokia Venture Partners and its portfolio companies, visit stand D6 in Hall 2 during the 3GSM

World Congress or visit the Nokia Venture Partners website at [www.nokiaventurepartners.com](http://www.nokiaventurepartners.com).

#### About Nokia Venture Partners:

Nokia Venture Partners is a leading global venture capital firm based in Menlo

Park, California. Launched in 1998, Nokia Venture Partners has USD \$650 million under management and leads investments in early stage mobile technology companies around the world. The fund is backed by a number of limited partners, including BMC Software, Goldman Sachs, Nokia and others, and

has a strong track record of leveraging its combined resources, experience and

contacts to help build successful mobile businesses. The firm also has offices

in Washington DC, London and Helsinki. For more information, visit [www.nokiaventurepartners.com](http://www.nokiaventurepartners.com).

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URL: <http://www.businesswire.com>

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COMPANY NAMES: nokia corp.

INDUSTRY NAMES: COMMUNICATIONS TECHNOLOGIES; COMPUTER SOFTWARE; COMPUTERS;  
DATA COMMUNICATIONS; MOBILE COMMUNICATIONS; NETWORKS; RADIO COMMUNICATION  
; TELECOMMUNICATIONS; TELEPHONES

EVENT NAMES: INVESTMENT; JOINT VENTURES; PRODUCT LAUNCHES; TECHNOLOGY

DEVELOPMENT  
?

?ds

Set	Items	Description
S1	18	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP)()L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)() (DM OR DEVICE()MA- NAGEMENT)
S2	223737	SOFTWARE OR FIRMWARE OR SOFT()WARE OR FIRM()WARE OR COMPUT- ER (1W) PROGRAM? OR COMPUTER ()READABLE() (MEDIA OR MEDIUM) OR DEVICE()DRIVER?
S3	1803564	UPDATE? ? OR UPDATING OR UP(1W)DATE OR MODIFY? OR MODIFI? - OR ADD??? OR CHANG???
S4	6	S1 AND S2(5N)S3
S5	15	S1 AND S2
S6	9	S5 NOT S4
S7	2038	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP)()L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)
S8	156	S7 AND S2(5N)S3
S9	32	S8 AND IC=G06F?
S10	27	S9 NOT (S4 OR S6)

?show files

File 348:EUROPEAN PATENTS 1978-2004/Dec W03

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File 349:PCT FULLTEXT 1979-2002/UB=20041230,UT=20041223

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?t s4/3,k/1-6

4/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01805287

Device management

Geräteverwaltung

Gestion d'équipements

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 1473873 A2 041103 (Basic)

APPLICATION (CC, No, Date): EP 2004101749 040427;

PRIORITY (CC, No, Date): FI 2030662 030502

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: H04L-012/24; H04Q-007/32

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CLAIMS A	(English)	200445	659
SPEC A	(English)	200445	4479
Total word count - document A			5138
Total word count - document B			0
Total word count - documents A + B			5138

...SPECIFICATION mailbox. A device management (DM) standard has been developed by OMA (Open Mobile Alliance). The OMA DM protocol specifies the protocol for transferring management actions between the client and the management server...

...be used in the messages, thus enabling consistent functioning of different devices supporting the standard. OMA DM currently provides two device management technologies; OMA WAP client provisioning based on the WAP Push architecture and OMA SyncML DM based on SyncML technology. The idea is to establish a trusted relationship with a DM...

...is critical for giving the end user control. Even though the mobile station supports the OMA DM standard, the network operator or service provider specific initiation of device management still remains cumbersome...

...message to the server S, e.g. a client initialization package according to the OMA SyncML DM protocol).

As illustrated below, there are many possible embodiments of the above illustrated method. It...

...arranged to include any device specific information stored in the DevInfo management object of a SyncML DM compliant client device. The IN may thus take into account the device model specific properties...

...put into use. According to a further embodiment, the device information can be used for software update purposes. In this embodiment, the

software version identifier from the TE is used to select software update packages to be sent by the selected device management server S.

As has already been...

...illustrates the initiation of device management utilizing a device management protocol, in this embodiment the SyncML Device Management (DM) protocol. The terminal TE, operating as a client device according to the SyncML device management standard, thus comprises a client agent CA that attends to functions associated with a management session in the client device. The device S operating as the SyncML DM server comprises a server agent SA. In the client device TE, the issues to be...

...to the server S. The messages 401 and 402 may utilize features in already specified SyncML DM specifications such as the specified message formats. For instance, the request 402 can be based...

...a device to be able to initiate a management session it must be provisioned with SyncML DM settings. The process of changing a device from an un-provisioned, empty, state in to a state where it is able to initiate a management session is called a SyncML DM bootstrap. Therefore, if the terminal TE has not previously performed such a SyncML DM bootstrap, it has to be performed for the TE as illustrated by the message 403...

...403, the server S may check the client capabilities from a capability database supporting the SyncML DM, for instance from the Nokia Terminal Management Server. The client TE can then be bootstrapped...

...initiation message in phase 202 of Figure 2 even if it has not provisioned with SyncML device management settings. The SyncML DM has been designed to meet the management requirements of many different types of devices. Currently two profiles, WAP and Plain, are specified, but as interest in the SyncML DM grows and its usage increases, more profiles can be added. In case of a WAP...

...bootstrap profile may be initiated from the intermediary node IN. For more details on the SyncML DM bootstrap, reference is made to the OMA SyncML specification "SyncML Device Management Bootstrap", version 1.1, 15 February 2002, 18 pages.

After the bootstrap or, if the TE has previously been provisioned with the SyncML device management settings, after the message 403, establishment of a SyncML device management session can be initiated. In case of a WAP profile, the bootstrap message 403 already...

...Next, packages #2 407, #3 408, and #4 409 may be sent according to the SyncML DM specifications. For a more detailed description of the SyncML device management protocol, reference is made to the SyncML organization specification 'SyncML Device Management Protocol', version 1.1, 15 February 2002, 37 pages.

According to a preferred embodiment, the...

4/3,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01754758

SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT FIRMWARE UPDATES

SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE MICROLOGICIEL

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WO 2004038546 040506

APPLICATION (CC, No, Date): EP 2003776472 031020; WO 2003US33241 031020  
PRIORITY (CC, No, Date): US 419903 P 021021  
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
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EXTENDED DESIGNATED STATES: AL; LT; LV; MK  
INTERNATIONAL PATENT CLASS: G06F-001/00  
LANGUAGE (Publication,Procedural,Application): English; English; English  
**SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT  
FIRMWARE UPDATES**  
**SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN  
ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE  
MICROLOGICIEL**

4/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01721167

**Method and apparatus for enabling distributed subscription services**  
**Verfahren und Vorrichtung zum Ermöglichen eines verteilten**  
**Abonnementsservices**

**Procede et appareil pour permettre des services abones distribues**

PATENT ASSIGNEE:

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PRIORITY (CC, No, Date): US 319622 P 021016; US 319623 P 021017; US 319624  
P 021017; US 319625 P 021017

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HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: G06F-017/60

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SPEC A	(English)	200417	18510
Total word count - document A			18956
Total word count - document B			0

Total word count - documents A + B 18956

...SPECIFICATION the DMA of embodiments and/or by complying with specific services transactions protocols.

An agent **software** component embedded into devices, **add** -on modules, and device proxies provides a common device model, common information management (CIM) application...

...device 110 from changes at the back-office 300. Embodiments further provide a unique, value- **added** , agent **software** component, the DMA 120, embedded into devices 110, add-on modules 115, and/or device...support in industry.

OSGi also sidesteps the server aspects of provisioning.

A third standard is **SyncML Device Management** . SyncML is a released standard focused on the details of keeping mobile devices in synch...case, a relatively small add-on component 115 is added to the device 110. The **add** -on component 115 contains necessary **software** and the DMA 120, as well as one or more connections to the device 110...

...with an embedded diagnostic agent in the device that can monitor system performance and make **software** or configuration **changes** automatically in order to keep the system running well in the field. However, many problems...Reset procedure can be followed which will reset all the passwords to default configuration.

New **software** services 140 can be **added** to the CS Platform add-on component through the normal DCS service subscription and activation...

4/3,K/4 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01124039 \*\*Image available\*\*

METHOD AND DEVICE FOR DEFINING OBJECTS ALLOWING TO ESTABLISH A DEVICE MANAGEMENT TREE FOR MOBILE COMMUNICATION DEVICES

PROCEDE ET DISPOSITIF DE DEFINITION D'OBJETS PERMETTANT D'ETABLIR UNE ARBORESCENCE DE GESTION DE DISPOSITIF POUR DES DISPOSITIFS DE COMMUNICATION MOBILES

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Patent and Priority Information (Country, Number, Date):

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Priority Application: WO 2002IB4857 20021121

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

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Fulltext Word Count: 17888

Fulltext Availability:

Detailed Description

## Claims

### Detailed Description

... in management objects, respectively, associated with respective device feature(s) and operable application(s), respectively.

**SyncML device management ( SyncML DM )** protocol allows management commands to be 1 5 executed on management objects and it uses...

...for synchronization of the device management information aforementioned.

The device management in accordance with the **SyncML DM** allows to structure the management objects in a hierarchical management tree containing all information which can be managed using the **SyncML DM** protocol. The management tree is based on a permanent part of the management tree defined and provided by the manufacturer of the respective electronic device supporting **SyncML device management** . The real management tree present in such an operated electronic device is composed of this...

...the management tree are provided and standardized by the SyncML Initiative in form of the **synchronization markup language device management ( SyncML DM )** standard.

According to an embodiment of the invention, the description document corresponds to a device...

...being based on XML and the like.

According to an embodiment of the invention, a **software** tool for **adding** at least one object into a plurality of objects establishing a hierarchical object structure is...

...program and/or executed.

According to an embodiment of the invention, there is provided a **computer program** for **adding** at least one object into a plurality of objects establishing a hierarchical object structure. The...

...the embodiments of the invention will be described with respect to a system supporting the **SyncML device management** standard or the related SyncML standard without limiting the invention thereto. Information about the SyncML standard and the **SyncML device management ( SyncML DM )** standard can be obtained from the SyncML Initiative providing publicly the full standard documentation. Same...

...serving devices.

A corresponding synchronization process in accordance with the SyncML protocol standard or the **SyncML device management** protocol standard, respectively, may be established via an appropriate logical communication connection. The logical communication...

...the SyncML protocol standard the SyncML synchronization protocol and hence also with respect to the **SyncML device management** protocol standard the **SyncML device management** protocol can be implemented on the top of appropriate protocols in accordance with the type...device management synchronization, the following description of the innovative concept will refer explicitly to the **SyncML DM** protocol.

The **SyncML DM** service itself is based on the exchange of a management document, which may be divided...

...in order to synchronize the device management data, i.e. the configuration data and settings. **SyncML DM** protocol comprises two parts: setup phase comprising authentication and device information exchange and management phase...

...can comprise an arbitrary number of iterations of the packages 3 and 4.

The aforementioned **SyncML DM** service being based on management message exchanges in accordance with the above described phases and... ..but not limiting thereto) for a managed client device 1 5 allowing to operate with **SyncML device management** service. The DevDetail object and the DevDetail object are interior objects which means that an...

...be operated in accordance with the above described exchange of management information corresponding to the **SyncML device management** service.

Each object and hence each information contained in a certain object is addressable. The...

...management tree and consequently the behavior of the managed client devices in view of the **SyncML device management** service differ.

This problem is addressed by the device description framework (DDF). The usage of...

...client device is capable to be managed by a management server being based on the **SyncML device management** service. The device description framework (DDF) should be embodied in such a way that it... least part of the management tree should be understood in conjunction with the above described **SyncML device management** service and the exchange of a management document.

In an operation S460, the operational sequence...

...the server via the synchronization adapter 340 and synchronization interface 330 in accordance to the **SyncML DM** protocol standard. The server 20 or server device management 220, respectively,

Claim

... of objects is a management tree, both being employed for device management according to the **synchronization markup language device management ( SyncML DM )** standard defined by the SyncML Initiative.

9 Method according to any one of the preceding...

...document being encoded in accordance with a corresponding description framework document type description (DTD).

10 **Software** tool for **adding** an entity into a hierarchical structure consisting of a plurality of entities, comprising program portions... ..networked device, a networked server, a terminal device or a communication terminal device. 1 1. **Computer program** product for **adding** an entity into a hierarchical structure consisting of a plurality of entities, comprising loadable program...

...a networked device, a networked server, a terminal device or a communication tenninal device.

12 **Computer program** product for **adding** an entity into a hierarchical structure consisting of a plurality of entities, wherein said computer...

4/3,K/5 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01117702 \*\*Image available\*\*

DATA SYNCHRONIZATION

SYNCHRONISATION DE DONNEES

Patent Applicant/Assignee:

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Helsinki, FI,  
Patent and Priority Information (Country, Number, Date):  
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Application: WO 2003FI801 20031028 (PCT/WO FI03000801)  
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AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR  
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HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW  
MX MZ NI NO NZ OM PG PH PL PT (utility model) PT RO RU SC SD SE SG SK  
(utility model) SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
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(utility model) LS MW (utility model) MW MZ (utility model) MZ SD  
(utility model) SD SL (utility model) SL SZ (utility model) SZ TZ  
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(utility model) ZW  
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Detailed Description  
Claims

#### Detailed Description

... specific data, such as  
mobile phone settings. An example of device management standards is the  
**SyncML device management** which is partly based on the SyncML data  
synchronization standard enabling data synchronization.  
  
[0003] A...  
  
...The means CBDM and SBDM can be implemented correspondingly in the CPU  
and SCPU as **added** to the **computer program** codes implementing the CA  
and the SA and SE, respectively. As stated above, the TE...

...first synchronization device and at least one of its functions during  
the execution of a **computer program** which **updates** the data stored  
in the memory of the second synchronization device. In that case a...

#### Claim

... data which is defined in a second device and which during the  
execution of a **computer program** which **updates** 1 0 the data stored  
in the memory of the synchronization device causes the synchronization...

01116509 \*\*Image available\*\*

SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT  
FIRMWARE UPDATES

SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN  
ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE  
MICROLOGICIEL

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Patent and Priority Information (Country, Number, Date):

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Priority Application: US 2002419903 20021021

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6138

SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT  
FIRMWARE UPDATES

SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN  
ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE  
MICROLOGICIEL

Fulltext Availability:

Detailed Description

Claims

English Abstract

A system for employing **SyncML DM** for **updating firmware** in mobile  
handsets and other devices. The system employs enhancements to **SyncML  
DM** specifications. A SyncML management client employs new commands,  
specified by the present invention, for retrieving **update** packages for  
**firmware updates**, for the verification of a received update package,  
the command for saving the update package...

...of the results of processing by the update agent (success, failure,  
etc.). More specifically, the **SyncML DM** management client employs new  
commands, specified by the present invention, for retrieving **update**  
packages for **firmware updates** and for **updating the firmware**  
selectively based on appropriateness, security and authentication,  
employing fault tolerant means.

French Abstract

L'invention concerne un systeme utilisant la **SyncML DM** pour mettre a  
jour des micrologiciels dans des combines sans fil ou d'autres  
dispositifs. Ce systeme utilise des ameliorations apportees a des  
specifications **SyncML DM**. Un client de gestion SyncML utilise de  
nouvelles commandes, specifiees par la presente invention, pour...  
...de mise a jour (succes, echec, etc.). De facon plus specifique, le  
client de gestion **SyncML DM** utilise de nouvelles commandes,  
specifiees par la presente invention, pour recuperer des programmes de

*applicant*



?t s6/3,k/1-8

6/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01130793 \*\*Image available\*\*

**TRANSFER OF PERSONAL DATA**

**TRANSFERT DE DONNEES PERSONNELLES**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200454298 A1 20040624 (WO 0454298)  
Application: WO 2002IB5311 20021211 (PCT/WO IB02005311)  
Priority Application: WO 2002IB5311 20021211

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 5528

Fulltext Availability:

Detailed Description

Detailed Description

... may be personalised by downloading or composing ring-tones. It is also  
possible to personalise **software** applications, for example, by  
selecting settings and entering or downloading data.

A user of a...

...a configuration on a plurality of mobile terminals very easily. This  
allows the setting of **software** parameters, remote trouble shooting and  
installing and upgrading **software**. However, **SyncML DM** is generally  
used for the configuration of multiple terminals at a time and the  
process...

...data and/or settings between the device and the server. The session may  
be a **SyncML DM** session.

According to another aspect of the present invention there is provided a  
server, for...

...data and/or settings between the device and the server. The session may  
be a **SyncML DM** session.

According to a further aspect of the present invention there is provided  
a system...

...data and/or settings between the device and the server. The sessions may

be a **SyncML** DM sessions.

According to a still further aspect of the present invention there is provided a...

...user's telephone number or IMSI. The operation of the processor II is controlled by **software** stored in the memory 13 and loaded into the processor. In operation, the processor receives...

...directly or indirectly, a processor 22 and a memory 23. The server 20 is a **SyncML** DM server. It issues **SyncML** DM commands to the mobile telephone 10 via the input/output interface 21 and correctly interprets ...

...maintains a management tree data structure 100 in the memory 13. The MC correctly interprets **SyncML** DM commands received from the server, executes appropriate actions in the mobile telephone 10 and sends...

...data and settings.

The server initiates the DM session 52 using the procedure described in **SyncML Device Management** Tree and Description, v1.1.1 and obtains the collection of personal data and settings...

...accessed. The server 20 then initiates a DM session 62 using the procedure described in **SyncML Device Management** Tree and Description, v1.1.1. It obtains the collection of personal data and settings...

6/3,K/2 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01123891 \*\*Image available\*\*

#### **PRIORIZATION OF MANAGEMENT OBJECTS**

#### **PRIORISATION D'OBJETS DE GESTION**

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Legal Representative:

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Helsinki, FI,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200446952 A1 20040603 (WO 0446952)

Application: WO 2003FI890 20031119 (PCT/WO FI03000890)

Priority Application: FI 20022079 20021121

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO  
CR CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK  
DM DZ EC EE (utility model) EE EG ES FI (utility model) FI GB GD GE GH GM  
HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NI NO NZ OM PG PH PL PT (utility model) PT RO RU SC SD SE SG SK  
(utility model) SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW (utility model) BW GH (utility model) GH GM (utility model) GM KE  
(utility model) KE LS (utility model) LS MW (utility model) MW MZ  
(utility model) MZ SD (utility model) SD SL (utility model) SL SZ  
(utility model) SZ TZ (utility model) TZ UG (utility model) UG ZM

(utility model) ZM ZW (utility model) ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 5321

Fulltext Availability:  
Detailed Description  
Claims

#### Detailed Description

... carried out automatically in connection with device management.

[0003] A device management standard is SyncML ( **Synchronization Markup Language** ) **device management** , which is partly based on SyncML data synchronization standard enabling data synchronization. A synchronization server...

...as a wallpaper or screen saver. The I/O management objects are arranged in the **SyncML device management** into a form resembling a tree in a management tree illustrated in Figure 1. The...

...identifier 'Nendor/Ringing Tones/'. Preferably, at least some of the management objects are standardised (the **SyncML device management** standards currently include three standardised management objects). The management objects may be fixed or dynamic...

...invention are achieved with a method, a device management system, an electronic device and computer **software** products, characterized in what is disclosed in the independent claims.

[0008] The preferred embodiments of...

...0010] The method of the invention is particularly applicable to a server device according to **SyncML Device Management** and a customer device according to SyncIVIL device management, in which priority data is determined...

...settings of an Internet access point, without being restricted to the management objects of the **SyncML device management** . What a data element generally refers to is a management object record provided with a ...

...In the following, a preferred embodiment of the invention is described in a system supporting **SyncML device management** . However, it should be noted that the invention could be applied in any device management...

...LAN. The customer device TE connected to the network LAN comprises a functionality, for instance **software** controlling a network card and data transmission, for communicating with the devices in the network...

...management session. The customer agent CA may be implemented by performing in the CPU computer **software** code stored in the memory MEM and the SA by performing in the SCPU computer **software** 1 5 code stored in the memory SMEM. As noted previously, the TE and the ...

...also operate as a management server during data transmission between the terminals TE. The computer **software** codes to be carried out in the central processing units CPU and SCPU may

allow...

...some of the preferred embodiments thereof being illustrated in Figures 4 and 5. The computer **software** may be stored into any memory means, such as the hard disk of a PC...  
...be loaded into the memory  
MEM; SMEM of the implementing device TE; S. The computer **software** can also be loaded through a network, for instance using a TCP/IP protocol stack.

It is also possible to use hardware solutions or a combination of hardware and **software** solutions for implementing the inventive means.

[0021] The management objects are typically based on XIVIL...

...are sent to the un-configured terminal TE. The Bootstrap process thus deviates from typical **SyncML device management**, in which a status is sent from the terminal. The application settings and general deviceI  
...

...according to the WAP provisioning settings must be added to the management tree of the **SyncML device management** protocol. In order to be able to deassemble the WAP provisioning document and to place...

...well as the messages determined for it. As to a more detailed description of the **SyncML device management** protocol, reference is made to the specification of the SyncML organization " **SyncML Device Management** Protocof", version 1. 1. 1, 2 October 2002.

I 0

[0027] The terminal TE receives...

...details of the RTPProperties elements,  
reference is made to the specification of the SyncML organization " **SyncML Device Management** Tree and Description", version 1. 1. 1 1 2 October 2002, in which a new...

Claim

... server device according to SyncML Device Management and in a customer device according to **SyncML Device Management**  
priority data for a management object comprising provisioning settings of a WAP protocol for a...

...a c t e r i z e d in that an electronic device supports **SyncML Device Management** and is arranged to determine the priority data for the management object comprising provisioning settings of a WAP protocol for a Bootstrap process.

1 1. A computer **software** product loadable into a memory of a data processing device, c h a r a c t e r i z e d in that said computer **software** product comprises computer **software** code, which is performed in a processor of the data processing device maintaining device management...

6/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01121605 \*\*Image available\*\*

ARRANGING SYNCHRONIZATION SESSION

ARRANGEMENT DE SESSION DE SYNCHRONISATION

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200444773 A1 20040527 (WO 0444773)

Application: WO 2003FI857 20031112 (PCT/WO FI03000857)

Priority Application: FI 20022024 20021113

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO  
CR CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK  
DM DZ EC EE (utility model) EE EG ES FI (utility model) FI GB GD GE GH GM  
HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NI NO NZ OM PG PH PL PT (utility model) PT RO RU SC SD SE SG SK  
(utility model) SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH (utility model) GH GM (utility model) GM KE (utility model) KE  
LS (utility model) LS MW (utility model) MW MZ (utility model) MZ SD  
(utility model) SD SL (utility model) SL SZ (utility model) SZ TZ  
(utility model) TZ UG (utility model) UG ZM (utility model) ZM ZW  
(utility model) ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 5362

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... data, such as the settings of a mobile station. One device management  
standard is **SyncML device management** that is partly based on the SyncML  
data  
synchronization standard.

[0003] Earlier, only a server...

...The object of the invention is  
achieved by a method, synchronization system, synchronization device and  
**computer program** product that are characterized by what is stated in  
the independent claims. Preferred embodiments of...

...typically synchronized. The invention can, however, be applied to a  
system employing any synchronization technology.

**SyncML device management** that is partly based on the SyncML  
standard has  
a similar problem with the selection...

...terminal TE connected to the network LAN comprises functionality, for  
instance a network card and **software** controlling data transmission, for  
communication with the devices in the network LAN. The local area...

...a sync engine SE.

[0015] CA, SA and SE can be implemented by executing a **computer  
program** code stored in the memory MEM of the central processing unit  
CPU. **Computer program** codes executed in the central processing unit  
CPU  
can also cause the terminal TE1 implement...

...server (SA, SE) or the client device according to role information stored in advance. The **computer program** can be stored on any memory media, such as PC hard disk or a CDROM...

...it can be loaded into the memory MEM of the device TEI for execution. The **computer program** can also be loaded through a network by using a TCP/IP protocol stack, for instance. It is also possible to use hardware solutions or a combination of hardware and **software** solutions to implement the inventive means.

[0016] The SyncML session between the sync server and...

...the performance of the devices, or some other property of the devices, such as the **software** version running in them. In this embodiment, either device could serve as the sync server...

#### Claim

... sameness of data items only if synchronization server is defined as its role.

16 A **computer program** product comprising a program code portion for controlling a synchronization device to set up a...

6/3,K/4 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

01104643 \*\*Image available\*\*

#### ADDRESSING A MANAGEMENT OBJECT ADDRESSAGE D'UN OBJET DE GESTION

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200427634 A1 20040401 (WO 0427634)  
Application: WO 2003FI688 20030919 (PCT/WO FI03000688)  
Priority Application: FI 20021683 20020920

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR  
CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM  
DZ EC EE (utility model) EE EG ES FI (utility model) FI GB GD GE GH GM HR  
HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW  
MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK (utility model) SK SL  
SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH (utility model) GH GM (utility model) GM KE (utility model) KE LS  
(utility model) LS MW (utility model) MW MZ (utility model) MZ SD  
(utility model) SD SL (utility model) SL SZ (utility model) SZ TZ  
(utility model) TZ UG (utility model) UG ZM (utility model) ZM ZW  
(utility model) ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 4883

Fulltext Availability:  
Detailed Description  
Claims

#### Detailed Description

... modification to take place automatically in association with device management.

One device management standard is **SyncML device management** (Synchronization Markup Language) based partly on the SyncML data synchronization standard enabling data synchronization. A...

...of the invention are achieved by a method, a device management system, electronic devices and **computer program** product, which are characterized by what is stated in the independent claims. Some preferred embodiments...

...to the settings of an Internet access point, without restriction to the management objects of **SyncML device management**. A data element generally refers to a record in a management object, having a predetermined...

...TIE connected to the network LAN comprises a functionality, e.g.

a network card and **software** controlling data transfer, for communication with the devices of the network LAN. The local area...

...027634 PCT/FI2003/000688

6

The TE, operating as a client device according to the **SyncML device management** standard, comprises a client agent CA that attends to functions associated with a management session...

...to the management session. The client agent CA can be implemented by executing a **computer program** code stored in the memory MEM in the CPU and the SA by executing a **computer program** code stored in the memory SMEM in the SCPU. As was stated before, the TE...

...it to operate as a management server in a session between the terminals TE. The **computer program** codes executed in the central processing units CPU and SCPU can be used to make...

...and addressing management objects, some embodiments thereof being illustrated in Figures 4 and 5. The **computer program** may be stored in any memory means, e.g. a hard disk in a PC...

...can be loaded in the memory MEM; SMEM of the executing device TE; S. The **computer program** may also be loaded via a network using the TCP/IP protocol stack, for example. It is also possible to use hardware solutions or a combination of hardware and **software** solutions to implement the inventive means.

In accordance with a preferred embodiment of the invention...

...other details associated with the management objects and the management tree according to the **SyncML device management**, reference is made to the SyncML organization specification '**SyncML Device Management Tree and Description**', version 1.1, 15 February 2002, 38 pages, where the content of...

...which a new management object has to be added to the management tree of

the **SyncML device management** protocol. In this case the procedure can be as shown in Figures 4 and 5...

#### Claim

... as a new entry in management trees maintained in a server device according to a **SyncML device management** protocol and in a client device according to the **SyncML device management** protocol.  
3.Amethodasclaimedinclaim2,characterized by coding at least part of the content of said data...

...c It e r i z e d in that the electronic device supports a **SyncML device management** protocol and is arranged to update said identifier as the entry of a new management object in a management tree maintained by the device.

10 A **computer program** product loadable in a memory of a data processing device, c h a r a c I t e r i z e d in that said **computer program** product comprises **computer program** code, which, executed in a processor of a data processing device maintaining device management objects...

6/3,K/5 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01100486 \*\*Image available\*\*

**METHOD, DEVICE AND SYSTEM FOR SYNCHRONIZING OF DATA PROVIDING FOR THE HANDLING OF AN INTERRUPTED SYNCHRONIZATION PROCESS**

**PROCEDE, DISPOSITIF ET SYSTEME DE SYNCHRONISATION DE FOURNITURE DE DONNEES POUR LE TRAITEMENT D'UN PROCESSUS DE SYNCHRONISATION INTERROMPU**

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METITALA Riku, Dunckeringkatu 1 B 6, FIN-33580 Tampere, FI,

Legal Representative:

MAGUIRE Francis J (et al) (agent), Ware, Fressola, Van Der Sluys & Adolphson LLP, 755 Main Street, P.O. Box 224, Monroe, CT 06468, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200423233 A2-A3 20040318 (WO 0423233)

Application: WO 2003IB3737 20030903 (PCT/WO IB03003737)

Priority Application: US 2002236010 20020903; US 2002291192 20021108

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD  
SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 13859

Fulltext Availability:

Detailed Description

Claims

Detailed Description



... status of the synchronization of the data or the message.

The invention also provides a **software** tool for synchronizing, comprising program portions for carrying out the steps of the aforementioned method, wherein the **software** tool is for being implemented in a **computer program** for being executed on a processing device, a I O terminal device, a communication terminal device or a network device, as well as a **computer program** or **computer program** product for synchronizing the same.

The invention also provides a device for use in a...

...the SyncML protocol standard, the SyncML synchronization protocol, and hence also with respect to the **SyncML device management** protocol standard, the **SyncML device management** protocol is implemented on the top of appropriate protocols in accordance with the type of...

#### Claim

... positive or a negative status of the synchronization of the data or the message.

25 **Software** tool for synchronizing, comprising program portions for carrying out the operations of the method of claim 16, wherein said **software** tool is for being implemented in a **computer program** for being executed on a processing device, a terminal device, a I O communication terminal device or a network device.

26 **Computer program** for synchronizing, comprising program code sections for carrying out the operations of the method of claim 16, wherein said **computer program** is for being executed on a processing device, a terminal device, a communication terminal device or a I O network device.

27 **Computer program** product for synchronizing, said **computer program** product comprising program code sections stored on a **computer readable medium** for carrying out the method of any of claims 16-26, wherein said **computer program** product is for being executed on a processing device, a terminal device, a communication terminal...

6/3,K/6 (Item 6 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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01080943 \*\*Image available\*\*

#### METHOD AND DEVICE FOR RETRIEVING DATA STORE ACCESS INFORMATION

PROCEDE ET DISPOSITIF PERMETTANT D'EXTRAIRE DES INFORMATIONS D'ACCES A DES MAGASINS DE DONNEES

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200404276 A1 20040108 (WO 0404276)

Application: WO 2002IB2523 20020628 (PCT/WO IB2002002523)

Priority Application: WO 2002IB2523 20020628

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

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Fulltext Word Count: 10247

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... the identified data store(s), corresponding devices adapted to perform these methods, computer programs and **software** tools which are disclosed in the independent claims. Additional embodiments of the invention are disclosed...

...URI) and the uniform resource name (URN).

According to an embodiment of the invention, a **software** tool for handling data store related information is provided. The **software** tool comprises program portions for carrying out the operations of the aforementioned methods when the **software** tool is implemented in a **computer program** and/or executed.

According to an embodiment of the invention, there is provided a **computer program** for handling data Store related information. The **computer program** comprises program code portions for carrying out the operations of the aforementioned methods when the...

...device, a computer or a network device.

According to an embodiment of the invention, a **computer program** product is provided which I 0 comprises program code portions stored on a **computer readable medium** for carrying out the aforementioned methods when said program product is executed on a processing...

...the SyncML protocol standard the SyncML synchronization protocol and hence also with respect to the **SyncML device management** protocol standard the **SyncML device management** protocol is implemented on the top of appropriate protocols in accordance with the type of...

Claim

... least one of a unifonn resource identifier (URI) and a uniform resource name (URN).

14 **Software** tool for handling data store related information, comprising program portions for carrying out the operations...

...any one of the claims I to 13, when said program is implemented in a **computer program** for being executed on a computer, a user terminal or a network device.

15 **Computer program** for handling data store related information, comprising program code sections for carrying out the operations of any one of the claims 1 to 13, when said **computer program** is executed on a computer, a user terminal or a network device.

16 **Computer program** product for handling data store related information, wherein said **computer program** product is comprising program code sections stored on a **computer readable medium** for carrying out the method of any one of the claims 1 to 13, when said **computer program** product is executed on a computer, a user terminal or a network device.

17 Device...

6/3,K/7 (Item 7 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01063388 \*\*Image available\*\*

**METHOD AND DEVICE FOR MANAGEMENT OF TREE DATA EXCHANGE**  
**PROCEDE ET DISPOSITIF DE GESTION D'ECHANGE DE DONNEES EN ARBORESCENCE**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2002IB1441 20020430 (PCT/WO IB0201441)  
Priority Application: WO 2002IB1441 20020430

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prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI  
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 10767

Fulltext Availability:

Detailed Description  
Claims

English Abstract

...is used to manage, contain and map information of a manageable device  
according to the **SyncML DM** protocol standard. A management server can  
request from such a device may the means of...

French Abstract

...de cartes ou de localisation d'un dispositif gerable conformement a la  
norme du protocole **SyncML DM**. Un serveur de gestion peut demander  
d'un tel dispositif qu'il soit l'organe...

Detailed Description

... services such as short message service (SMS), multimedia message  
service (MMS) and the like. The **SyncML device management** relates to  
the harmonizing of configuration data. The respective configuration data  
or information is contained in management objects, respectively,  
associated to the device features and the applications, respectively.

**SyncML device management ( SyncML DM )** protocol allows management  
commands to be executed on management objects and it uses a package...

...device, i.e. configuration parameters of device features and/or  
configuration parameters and settings of **software** applications executed  
on the device.

Actions that can be taken against this object might include...

...setting parameter keys and values. Another management object might be the run-time environment for **software** applications on a device. Actions that can be taken against this type of object might include installing, upgrading, or uninstalling **software** elements. Preferably, dedicated management servers provide the required configuration parameters, settings, keys and values for synchronization of the device management information aforementioned.

The device management in accordance with the **SyncML device management** structures the management objects in a hierarchical management tree containing all information which can be managed using the **SyncML DM** protocol. The management tree is based on a permanent part of the management tree defined and provided by the manufacturer of the respective electronic device supporting **SyncML device management**. The real management tree present in such an operated electronic device is composed of this...

...a corresponding client device to be managed by sending a GET command defined in the **SyncML DM** standard. The GET command points it to a certain management object of the management tree...

...takes a new protocol round which is time consuming. Particularly, since the SyncML and the **SyncML DM** standards are developed to be used in a wireless communication environment, i.e. a cellular...

...generating a corresponding request response, corresponding devices adapted to perform these methods, computer programs and **software** tools which are disclosed in the independent claims. Preferred embodiments of the invention are disclosed...

#### Claim

... script application. According to an embodiment of the invention, the request is based on the **synchronization markup language device management ( SyncML DM )** protocol or standard, respectively. According to an embodiment of the invention, the command of the...

...retrieved therefrom. According to an embodiment of the invention, the request is based on the **synchronization markup language device management ( SyncML DM )** protocol or standard, respectively. According to an embodiment of the invention, the response contains a...

...respective node corresponding to the ITEM element. According to an embodiment of the invention, a **software** tool for handling management related information is provided. The **software** tool comprises program portions for carrying out the operations of the aforementioned methods when the **software** tool is implemented in a **computer program** and/or executed. According to an embodiment of the invention, there is provided a **computer program** for handling management related information. The **computer program** comprises program code portions for carrying out the operations of the aforementioned methods when the...

...device, a computer or a network device. According to an embodiment of the invention, a **computer program** product is provided which comprises program code portions stored on a **computer readable medium** for carrying out the aforementioned methods when said program product is executed on a processing...

...the following, the embodiments of the invention will be described in a system supporting the **SyncML device management** standard or the related SyncML standard without limiting the invention thereto. Information about the SyncML standard and the **SyncML device management** standard can be obtained from the SyncML Initiative providing publicly the full standard documentation. Same...

...serving devices. A corresponding synchronization process in accordance with the SyncML protocol standard or the **SyncML device management** protocol standard, respectively, may be established via an appropriate

logical communication connection. The logical communication...

- ...the SyncML protocol standard the SyncML synchronization protocol and hence also with respect to the **SyncML device management** protocol standard the **SyncML device management** protocol can be implemented on the top of appropriate protocols in accordance with the type...
- ...device management synchronization, the following description of the innovative concept will refer explicitly to the **SyncML DM** protocol. The **SyncML device management** service itself is based on the exchange of a management document, which may be divided...
- ...plurality messages or packages, respectively, comprising instructions in order to synchronize the device management data. **SyncML DM** Protocol consists of two parts: setup phase comprising authentication and device information exchange and management...
- ...management session can comprise an arbitrary number of iterations of the packages 3 and 4. **SyncML DM** protocol uses the authentication framework provided by the SyncML standard, with some extensions defined in **SyncML device management** security. Both **SyncML DM** Protocol managed client device and management server have to be authenticated to each other. Authentication...
- ...be performed at different levels, however. If the transport level has built-in authentication mechanism **SyncML DM** protocol-level authentication may be replaced thereby. If the transport level does not have sufficiently strong authentication feature, **SyncML DM** Protocol-level authentication is to be used. The Fig. 2a and 2b show diagrams illustrating...
- ...like structures of device management information, i.e. the management trees. Each device supporting the **SyncML DM** protocol contains a such management tree. The management tree arranges the complete management information divided...
- ...objects, respectively, are the entities which can be manipulated by management actions carried over the **SyncML DM** protocol. A node can contain related objects being as small as an integer or a large and complex like a background picture or screen saver. The **SyncML DM** protocol is agnostic about the contents, or values, of the nodes and treats the node...request in accordance with the SyncML DM protocol has to fulfill some structural requirements. A **SyncML DM** protocol message is a well-formed extended markup language (XML) document identified by the **SyncML DM** root or document element type. The document consists of a header and a body. The...
- ...all routing and versioning information, while the body is a container for one or more **SyncML DM** instructions. The instructions are containers for other element types that describe the specifics of the...
- ...including any device management data or meta-information. incorporated here, too, are features such as **SyncML DM** data formats and **SyncML DM** capabilities exchange are incorporated. In an operation S110, the request or the section of the...
- ...of a modified GET command. The basic GET command is defined and provided by the **SyncML DM** protocol standard. In an operation S111, a corresponding command is coded which indicates to the...
- ...the generating or coding of the request is finalized, e.g. in accordance with the **SyncML DM** protocol standard. Further commands can be included in the request subordinate or superordinate to the...
- ...1. Advantageously, the request is package type 4 response. A response in accordance with the **SyncML DM** protocol has to fulfill some structural requirements. Basically, such a request is divided into a...
- ...modified GET command response. The basic GET command response is defined and provided by the **SyncML DM** protocol standard. In an operation S21

1, the nodes which are to be explored are...

...retrieved information of an identified node, respectively. The coding of the section bases on the **SyncML DM** protocol standard. That is, the coding to performed as if the coded information is requested...

...Data>" and a final term "</Data>" and further completing definitions satisfying and provided by the **SyncML DM** protocol standard. The identified node is coded in a SOURCE definition based on the URI...

...generating or coding of the request response is finalized, e.g. in accordance with the **SyncML DM** protocol standard. Further responses or even commands can be included in the response. The finalized...

...the server via the synchronization adapter 340 and synchronization interface 330 in accordance to the **SyncML DM** protocol standard. The server 20 or server device management 220, respectively, receives or sends messages...

...several advantages to the device management, especially to the device management in accordance with the **SyncML DM** protocol standard. The combination of the two basic method according to embodiments of the invention...

...is based on the synchronization markup language (SyncML) protocol and especially is based on the **synchronization markup language device management ( SyncML DM )** protocol.

8 Method according to claim 7, characterized in that said command of said request...is based on the synchronization markup language (SyncML) protocol and especially is based on the **synchronization markup language device management ( SyncML DM )** protocol.

17 Method according to claim 16, characterized in that said response contains a RESULTS...

...GET-command has been generated addressing said respective node corresponding to said ITEM element.

19 **Software** tool for handling management related information, comprising program code portions for carrying out the operations of any one of claims 1 to 18, when said program is implemented in a **computer program** for executing on a computer, a user terminal or a network device.

20 **Computer program** for handling management related information, comprising program code section for carrying out the operations of...  
...said program is run on a computer., a user terminal or a network device.

21 **Computer program** product for handling management related information, wherein said **computer program** product is comprising program code sections stored on a **computer readable medium** for carrying out the method of any one of claims 1 to 18, when said...

6/3,K/8 (Item 8 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01053589 \*\*Image available\*\*

**METHOD AND APPARATUS FOR SYNCHRONIZING HOW DATA IS STORED IN DIFFERENT DATA STORES**

**PROCEDE ET APPAREIL PERMETTANT DE SYNCHRONISER LA MANIERE DONT DES DONNEES SONT STOCKEES DANS DIFFERENTS MAGASINS DE DONNEES**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2003IB1097 20030326 (PCT/WO IB0301097)

Priority Application: US 2002115268 20020402

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8804

Fulltext Availability:

Detailed Description

Claims

English Abstract

...12), and devices (11 12) operating according to the method as well as  
a corresponding **computer program** by which either of the devices (11  
12) is operable according to the method. According...

Detailed Description

... a management server for the client. See

<http://www.syncml.org/> to find the specificatio , **SyncML**

**Device Management** Protocol. **SyncML Device Management** Protocol  
allows management commands to be executed on management  
objects and it uses a package...

...be

taken against this object might include reading and setting  
elements. Actions are represented by **SyncML Device Management**  
Protocol Commands, which are described in SyncM  
Representation Protocol, Device Management usage. The  
commands and...a client in the client server  
model.

In a fourth aspect of the invention, a **computer program**  
is provided for indicating operating instructions for a  
telecommunications device (11 12) so that the...also in respect to the  
second device.

In a fifth aspect of the invention, a **computer program** is  
provided for indicating operating instructions to a sync agent  
so that the sync agent...

Claim

... devicesj@(11 12) is

operative as a client in the client server model.

23 A **computer program** for providing instructions to a

. A **computer program** for providing instructions to a sync  
agent (11b 12b) so that the sync agent (11b...

?

?t s10/3,k/7,8,11

10/3,K/7 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01128389 \*\*Image available\*\*

**SELECTING DATA FOR SYNCHRONIZATION AND FOR SOFTWARE CONFIGURATION**  
**SELECTION DE DONNEES EN VUE DE SYNCHRONISATION ET DE CONFIGURATION DE**  
**LOGICIEL**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2002FI986 20021204 (PCT/WO FI02000986)  
Priority Application: WO 2002FI986 20021204

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(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT (utility model) AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR  
CU CZ (utility model) CZ DE (utility model) DE DK (utility model) DK DM  
DZ EC EE (utility model) EE ES FI (utility model) FI GB GD GE GH GM HR HU  
ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK (utility model) SK SL TJ TM TN  
TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK  
TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14026

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description  
Claims

Detailed Description

... of the terminal and application in use.

[0003] For improved synchronization of application data, a

**Synchronization Mark - up Language ( SyncML )** based on the  
Extensible Mark

up Language (XML) has been developed. A **SyncML** synchronization protocol  
employing messages of **SyncML** format allows the data of any application  
to

be synchronized between any networked terminals. The **SyncML**  
synchronization protocol functions both in wireless and in fixed networks  
and supports a plural number of transmission protocols. **SyncML** provides  
both a synchronization protocol and a data representation protocol.

[0004] The implementation of data synchronization is described in  
the **SyncML** standard, but the standard does not specify in detail how to  
select the data that...

...software

1 5 components into wireless data terminals. The radio bandwidth is,  
however, limited and **software updates** via the air interface can be  
expensive. Also the user typically needs to know the already existing  
**software** components and select the correct **update** or plug-in to be



downloaded. A lot of unnecessary or incompatible software data may...

Claim

... any

synchronization method. The synchronization may be carried out using a protocol based on the **SyncML** standard, although the scope of application of the invention is not restricted thereto. According to the **SyncML** standard, a synchronization session is first initialized in step 409 to select the database to be synchronized. A **SyncML** client device (TE) comprises a Sync Client Agent executing the **SyncML** protocol. The client agent may send the **SyncML** server (S) a **SyncML** message (Client Modifications) containing information about the changes made to the selection data set since the last message was sent. The

**SyncML** server comprises a Sync Server Agent, which controls the synchronization, and a Synchronization Engine, and it usually waits for the client's initiative for the synchronization. The **SyncML** server synchronizes the data, i.e. analyses the changes made to the selection data set and harmonizes the data items (makes the necessary additions, replacements and deletions).

The **SyncML** server then sends the client device a Server Modifications message which comprises the information about...

...the server S. Although simple, the above example serves to illustrate synchronization based on the **SyncML** standard.

[0040] It is also possible to use a modified **SyncML** protocol, in which case the data to be synchronized can be selected during ...also possible to define during the synchronization session whether the terminal TE functioning as a **SyncML** client and the server S functioning as a **SyncML** server support adaptive synchronization. In that case the TE uses the initialization message to request...

...type for use, the synchronization type being provided with a specific Alert code in the **SyncML** standard. If the S supports adaptive synchronization, the routine may proceed according to steps 402...

...be used, and, according to one

embodiment, a Device Management Protocol partly similar to the **SyncML** protocol is used.

[0043] Figure 5 shows a method according to a second preferred embodiment...

...user data item in many ways. According to one embodiment, the size of the related **software** data items is **added** to the size of the user data item. According to another embodiment, the (combined) utility of the related **software** data item(s) is **added** to the utility of the user data item (representing how software features may increase the ...

...utility, a low default relevance could be used if the maintainer does not wish to **add** relevance values for new **software** data items.

[0067] In the following, referring again to Figure 7, the selection of software...

...data

items. Phase 902 may also be carried out when the terminal TE needs a **software** configuration check or **updating** e.g. on the basis of a user request or a certain time interval (e.g. a virus protection **software** may require regular **updating**). This phase 902 may also be initiated when a file is selected and the required...data items. The server responds and the data terminal receives 908 the data items and **updates** its **software** configuration.

[0083] Although not shown in Figure 9, the metadata may be modified (as illustrated...

...used when modifying the metadata e.g. to increase the relevance or utility of a **software** **update** as time passes and the terminal's software

becomes  
more obsolete. This would be useful...

10/3,K/8 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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01127055 \*\*Image available\*\*

**SOFTWARE SELF-REPAIR TOOLKIT FOR ELECTRONIC DEVICES**  
**BOITE A OUTILS D'AUTOREPARATION DE LOGICIELS POUR DISPOSITIFS ELECTRONIQUES**

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

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Main International Patent Class: G06F

Fulltext Availability:

Detailed Description  
Claims

English Abstract

...error occurred, and may communicate the parameters or an identifier to  
a server, to retrieve **update** information for correcting the **firmware** /  
**software** error or exception. The execution environment may be single or  
multi-threaded, and may be...

Detailed Description

... manufacturers of the electronic devices, by telecommunication  
carriers, or by third parties.

1

[0006] An **update** of **firmware** or firraware components typically  
involves procedures to be performed in a careful and error free...

...left with taking it back to a service center of the manufacturer to have  
the **firmware** / **software** **modified** or replaced.

[0008] Further limitations and disadvantages of conventional and  
traditional approaches will become apparent...

...communication network, the update information based upon the at least  
one parameter, and a third **firmware** component for applying the **update**

*Applicant*

information to at least a portion of the at least one of **firmware** and **software**...

...upon the identifier, and updating at least a portion of the at least one of **firmware** and **software** using the **update** information. The at least one parameter may comprise at least one of a type of...

...at least one parameter related to the at least one of a **firmware** and a **software** error, and identifying **update** information for correcting the at least one of a **firmware** and a **software** error. Such an embodiment may also comprise receiving the update information via a communication network, and **updating** at least one of **firmware** and **software** using the **update** information. The communication network may comprise a wireless network, and the update information may comprise...

...version.

[0014] Further aspects of the present invention may be observed in a network for **updating** at least one of **firmware** and **software** in at least one updatable electronic device. Such a network may comprise at...

...interface, and the at least one updatable electronic device may use the update information to **update** the at least one of **firmware** and **software**. The **update** information may comprise an update package having a set of instructions for converting the at...

...DETAILED DESCRIPTION OF THE INVENTION

[0019] The present invention relates generally to the process of **updating software / firmware** in electronic devices and, more specifically, to the use of a software self-repair toolkit...

...exceptions encountered during the, execution of its **firmware/software**, and to identify, download, and apply **update** packages to fix the **firmware / software** bugs that cause such errors or exceptions.

[0021] The software self-repair toolkit 123 of...

...and/or exception may be saved, and subsequently used to help identify an appropriate **firmware / software update**, to correct the occurrence of the error and/or exception. An appropriate update package to...

...update package(s) are stored, etc., and may restart/reboot the electronic device 109. The **update** agent 125 of the **software** self-repair toolkit 123 may then be employed to apply the update package(s) to...

...embodiment may use an update agent, such as update agent 125 of Fig. 1, to **update** the errant **firmware / software** using the retrieved **update** package(s). The update agent 125 may then initiate a restart/reboot of the electronic...

...the retrieved update package(s), and employ the update agent 125 to apply the received **update** package(s) to the associated **firmware / software** of electronic device 109. The software self-repair toolkit 123 may then initiate a...

...package(s), and provide the appropriate update package(s) to the electronic device 109. The **update** agent 125 of the **software** self-repair toolkit 123 of electronic device 109 may then be employed to apply any...

...subject matter of which is hereby incorporated herein by reference in its entirety.

When the **update** agent 125 of the **software** self-repair toolkit 123 is to apply a retrieved update package to one of the...

...loaders module 137. The update agent 125 may then be employed to apply

the retrieved **update** package(s) to the **firmware / software** of electronic device 109. In one embodiment of the present invention, the update agent 125...

...server 119. The manager may verify and/or authenticate the update package, and apply the **update** package to the **firmware / software** of electronic device 109, using the update agent 125. Following correction of the firmware/software...

...protocol (WAP) links, or http links, employing an appropriate format such as, for example, a **SyncML** message format. Such protocols may be used over wireless networks such as, for...be used by an update agent, such as update agent 125 of Fig. 1, to **update** the feature/application **software** (block 219),

15

[0039] The **update** agent may also use information about the feature/application maintained by a CAP module, such...

...be used by an update agent, such as update agent 125 of Fig. 1, to **update** the application **software** (block 319).

[0045] The **update** agent may also use information about the feature/application maintained by a CAP module, such...

#### Claim

... communication

network, the update information based upon the at least one parameter; and a third **firmware** component for applying the **update** information to at least a portion of the at least one of firmware and software...

...the

identifier; and

20

updating at least a portion of the at least one of **firmware** and **software** using the **update** information.

15 The device of claim 14 wherein the at least one parameter comprises at ...

...at least one parameter related to the at least one of a firmware and a **software** error;

identifying **update** information for correcting the at least one of a firmware and

a **software** error;

receiving the **update** information via a communication network; and

**updating** at least one of **firmware** and **software** using the **update** information.

28 The method of claim 27 wherein the communication network comprises a wireless network...

...wireless interface; and

the at least one updatable electronic device using the update information to **update** the at least one of **firmware** and software.

31 The network of claim 30 wherein the update information comprises an update...

10/3,K/11 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

01049127 \*\*Image available\*\*

SYSTEM AND METHOD FOR DELIVERING DATA IN A NETWORK

SYSTEME ET PROCEDE DE LIVRAISON DE DONNEES DANS UN RESEAU

Patent Applicant/Assignee:

VERDISOFT CORPORATION, 3420 Hillview Avenue, Lobby 6, Palo Alto, CA  
94304-1320, US, US (Residence), US (Nationality)

Inventor(s):

SRINIVASAN Venkatachary, 781 The Dallas Avenue, Sunnyvale, CA 94087, US,  
SCHULZ Torsten, Brahmsallee 23, 25421 Pinneberg, DE,

Legal Representative:

GRAY Andrew J (et al) (agent), Pennie & Edmonds LLP, 1155 Avenue of the  
Americas, New York, NY 10036, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200379145 A2-A3 20030925 (WO 0379145)

Application: WO 2003US7182 20030311 (PCT/WO US03007182)

Priority Application: US 2002363877 20020311

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG  
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 14206

Main International Patent Class: G06F-015/173

Fulltext Availability:

Detailed Description

Claims

English Abstract

...plurality of characteristics, detecting a change in data associated  
with one of the back-end **software** modules, receiving the **change** in  
data, in response to an interaction with one of the plurality of  
electronic devices...

Detailed Description

... number of options such as SMS, MMS, wireless internet (WAP), fast  
internet access, "Bluetooth" connectivity, **SyncML**, transparent access  
to data such as e-mail, contacts, and calendar - even delivered through a  
...can monitor devices such as a refrigerator, send data to their  
servers, analyze the data, **modify** the **software**, and prevent future  
problems. In a similar way, the car controller system monitoring the  
engine...of electronic devices, the change in the data associated with  
one of the back-end **software** modules is received. Finally, an **updated**  
characterization for the electronic device is created. In some  
embodiments, each separate characterization includes a...protocol adapter  
1305. The protocol adapter communicates with devices 12 via a protocol  
such as "**syncML**" or SOAP. It is to be understood that the apparatus of  
the present invention is...a service, the job is not completed until all  
the files are downloaded. For a **SyncML** device, a job is defined to be  
all of the messages in a package that need...of transport protocols. In  
some embodiments of the present invention, client module 614 comprises a  
**SyncML** stack (see, for example, <http://www.syncml.org>).

5 [0 1 32] Software modules 616 include all manner of applications found  
in...link libraries, and virtual machines and software modules such as  
patches and/or upgrades that **modify** the first type of **software**  
modules. The **software** modules database is preferably **updated** as new  
**software** modules become available.

[0138] One embodiment of the

Claim

... change in data associated with a back-end software module;  
communicating with said back-end **software** module to query said **change**  
in

said data; and  
obtaining the data that has been **changed** from said back-end **software**  
module.

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Set	Items	Description
S1	8	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE) () (DM OR DEVICE()MA- NAGEMENT)
S2	7	RD (unique items)
S3	2131	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)
S4	1784091	SOFTWARE OR FIRMWARE OR SOFT()WARE OR FIRM()WARE OR COMPUT- ER (1W) PROGRAM? OR COMPUTER ()READABLE() (MEDIA OR MEDIUM) OR DEVICE()DRIVER?
S5	353573	UPDATE? ? OR UPDATING OR UP(1W)DATE
S6	2	S3 AND S4(5N)S5
S7	1	S6 NOT S2

?show files

File 8: Ei Compendex(R) 1970-2005/Dec W4  
(c) 2005 Elsevier Eng. Info. Inc.

File 35: Dissertation Abs Online 1861-2004/Dec  
(c) 2004 ProQuest Info&Learning

File 103: Energy SciTec 1974-2004/Dec B1  
(c) 2004 Contains copyrighted material

File 65: Inside Conferences 1993-2004/Dec W4  
(c) 2004 BLDSC all rts. reserv.

File 2: INSPEC 1969-2004/Dec W2  
(c) 2004 Institution of Electrical Engineers

File 94: JICST-EPlus 1985-2004/Nov W4  
(c) 2004 Japan Science and Tech Corp (JST)

File 438: Library Lit. & Info. Science 1984-2004/Oct  
(c) 2004 The HW Wilson Co

File 111: TGG Natl. Newspaper Index (SM) 1979-2004/Dec 29  
(c) 2004 The Gale Group

File 603: Newspaper Abstracts 1984-1988  
(c) 2001 ProQuest Info&Learning

File 483: Newspaper Abs Daily 1986-2004/Dec 31  
(c) 2005 ProQuest Info&Learning

File 6: NTIS 1964-2004/Dec W4  
(c) 2004 NTIS, Intl Cpyrght All Rights Res

File 144: Pascal 1973-2004/Dec W1  
(c) 2004 INIST/CNRS

File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

File 34: SciSearch(R) Cited Ref Sci 1990-2004/Dec W4  
(c) 2004 Inst for Sci Info

File 62: SPIN(R) 1975-2004/Oct W4  
(c) 2004 American Institute of Physics

File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Nov  
(c) 2004 The HW Wilson Co.

File 266: FEDRIP 2004/Sep  
Comp & dist by NTIS, Intl Copyright All Rights Res

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?t 's2/5/1-7

2/5/1 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

07045164 E.I. No: EIP04408386814

**Title: An extensible agent toolkit for device management**

Author: State, R.; Festor, O.; Zores, B.

Corporate Source: LORIA-INRIA Lorraine, 54602 Villers-les-Nancy, France

Conference Title: 2004 IEEE/IFIP Network Operations and Management

Symposium: Managing Next Generation Convergence Networks and Services, NOMS 2004

Conference Location: Seoul, South Korea Conference Date: 20040401-20040401

Sponsor: Institute of Electrical and Electronics Engineers, IEEE; IEEE Communications Society; International Federation for Information Processing, IFIP

E.I. Conference No.: 63563

Source: IEEE Symposium Record on Network Operations and Management Symposium 2004 IEEE/IFIP Network Operations and Management Symposium: Managing Next Generation Convergence Networks and Services, NOMS 2004 2004.

Publication Year: 2004

CODEN: INOSE3

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 0410W1

Abstract: The advent of multiple connected and interoperating devices is becoming almost common place in modern lifestyle. The management of these devices is an important asset for providing acceptable services to end users. Novel approaches are being developed that respect the communication, processing and power capacities of these limited devices. One of these approaches is the **SyncML Device Management**. In this paper, we present an open-source agent toolkit built around the SyncML model and evaluate the performance and cost of this approach in the context of limited devices supposed to host management agents. 23 Refs.

Descriptors: \*Mobile computing; Communication; Bandwidth; Program processors; XML; Synchronization; Servers; Management

Identifiers: Device management; Agent toolkit; Management agents; Wireless transport technology

Classification Codes:

716.1 (Information & Communication Theory); 723.1 (Computer Programming); 912.2 (Management)

723 (Computer Software, Data Handling & Applications); 716 (Electronic Equipment, Radar, Radio & Television); 912 (Industrial Engineering & Management)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATION ENGINEERING); 91 (ENGINEERING MANAGEMENT)

2/5/2 (Item 1 from file: 111)

DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)

(c) 2004 The Gale Group. All rts. reserv.

08784552 Supplier Number: 122316991

**mFormation Adds OMA DM Over-the-Air Firmware Update Management -FOTA- Capabilities to its mFormation SERVICE MANAGER Suite.**

Business Wire, NA

Sept 21, 2004

LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: mFormation Technologies Inc.

DESCRIPTORS: Computer software industry

GEOGRAPHIC CODES/NAMES: 1USA United States

SIC CODES: 7372 Prepackaged software

FILE SEGMENT: NW File 649



2/5/3 (Item 2 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2004 The Gale Group. All rts. reserv.

08779879 Supplier Number: 122108310  
**Insignia Announces Secure System Provisioning v2 to Provide Comprehensive Mobile Device Management Platform Interoperable with OMA - DM Compliant Phones.**  
Business Wire, NA  
Sept 16, 2004  
LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Insignia Solutions Inc.  
DESCRIPTORS: Computer software industry  
GEOGRAPHIC CODES/NAMES: 1USA United States  
SIC CODES: 7372 Prepackaged software  
FILE SEGMENT: NW File 649

2/5/4 (Item 3 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2004 The Gale Group. All rts. reserv.

07823441 Supplier Number: 92044203  
**SyncML Announces 18 New Compliant Products, SyncML DM Engineering Event Held; 99 Devices Now Certified SyncML Compliant.**  
Business Wire, 2369  
Sept 25, 2002  
LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Starfish Software Inc.  
DESCRIPTORS: Computer software industry  
GEOGRAPHIC CODES/NAMES: 1USA United States  
FILE SEGMENT: NW File 649

2/5/5 (Item 4 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2004 The Gale Group. All rts. reserv.

07509258 Supplier Number: 82329176  
**SyncML Device Management Makes Public Debut; The SyncML Initiative Showcases Cooperation by Device Manufacturers and Server Solutions Providers.**  
Business Wire, 2379  
Jan 30, 2002  
LANGUAGE: English RECORD TYPE: Citation

FILE SEGMENT: NW File 649

2/5/6 (Item 5 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2004 The Gale Group. All rts. reserv.

07501688 Supplier Number: 82131593  
**Starfish Announces Device Management Support; Leader in Mobility Management Solutions for Wireless to Add SyncML DM to Its Data Mobility Infrastructure.**  
Business Wire, 0129  
Jan 25, 2002  
LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Mobility Electronics Inc.; Starfish Software Inc.  
DESCRIPTORS: Computer peripherals industry; Computer software industry  
GEOGRAPHIC CODES/NAMES: 1USA United States  
PRODUCT NAMES: 3573200 (Computer Peripherals); 7372000 (Computer Software)

SIC CODES: 3577 Computer peripheral equipment, not elsewhere classified;  
7372 Prepackaged software  
SIC CODES (NAICS): 33411 Computer and Peripheral Equipment Manufacturing  
; 51121 Software Publishers  
FILE SEGMENT: NW File 649

2/5/7 (Item 6 from file: 111)  
DIALOG(R)File 111:TGG Natl.Newspaper Index(SM)  
(c) 2004 The Gale Group. All rts. reserv.

07450157 Supplier Number: 80877864  
**Synchrologic to Support** SyncML Device Management **Standard.**  
Business Wire, 2169  
Dec 18, 2001  
LANGUAGE: English RECORD TYPE: Citation

COMPANY NAMES: Synchrologic Inc.  
DESCRIPTORS: Computer software industry  
PRODUCT NAMES: 7372000 (Computer Software)  
SIC CODES: 7372 Prepackaged software  
SIC CODES (NAICS): 51121 Software Publishers  
FILE SEGMENT: NW File 649  
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?t s7/5/1

7/5/1 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

07085951 E.I. No: EIP04448431900

**Title: Beam us up, scotty**

Author: Joseph, Abraham

Source: Total Telecom n OCT. October 2004. p 41-42

Publication Year: 2004

ISSN: 1740-1267

Language: English

Document Type: JA; (Journal Article) Treatment: G; (General Review)

Journal Announcement: 0411W1

Abstract: The issue of use of over-the-air device management solutions as a time-saving and cost effective method of fixing and **updating** next-generation mobile **software**, is discussed. These solutions **update** the phone in the customer's hands without the high overhead of its being returned to the service center. With the right systems in place, these solutions enable operators to charge for backup and restoration of personal information. The **Open Mobile Alliance (OMA)** is undertaking a major standardization effort on device management. The two device management challenges include the increasing size of firmware in phones, and the interdependencies of software components from different vendors. (Edited abstract)

Descriptors: \*Mobile telecommunication systems; Computer software; Firmware; Codes (symbols); Computer programming languages; Strategic planning; Industrial management; Industrial economics; Cost effectiveness.

Identifiers: Device management solutions; Device parameters; Device development; Content management solutions

Classification Codes:

723.1.1 (Computer Programming Languages)

722.1 (Data Storage, Equipment & Techniques); 723.1 (Computer Programming); 723.2 (Data Processing); 912.2 (Management); 911.2 (Industrial Economics)

716 (Electronic Equipment, Radar, Radio & Television); 723 (Computer Software, Data Handling & Applications); 722 (Computer Hardware); 912 (Industrial Engineering & Management); 911 (Cost & Value Engineering; Industrial Economics)

71 (ELECTRONICS & COMMUNICATION ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

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Set	Items	Description
S1	2	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE) () (DM OR DEVICE()MA- NAGEMENT)
S2	153	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)
S3	136082	SOFTWARE OR FIRMWARE OR SOFT()WARE OR FIRM()WARE OR COMPUT- ER (1W) PROGRAM? OR COMPUTER ()READABLE() (MEDIA OR MEDIUM) OR DEVICE()DRIVER?
S4	2861961	UPDATE? ? OR UPDATING OR UP(1W)DATE OR MODIFY? OR MODIFI? - OR ADD??? OR CHANG???
S5	2	S2 AND S3(5N)S4
S6	1	S5 NOT S1
S7	10	S2 AND S3
S8	7	S7 NOT (S1 OR S6)

?show files

File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)

(c) 2004 JPO & JAPIO

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200482

(c) 2004 Thomson Derwent

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?t s1/5/1-2

1/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

016216710 \*\*Image available\*\*  
WPI Acc No: 2004-374598/200435  
XRPX Acc No: N04-298044

**Synchronization mark-up language management system for mobile phone, has  
synchronization markup language device management server for  
interpreting enhancement to SyncML DM specifications for updating  
firmware**

Patent Assignee: BITFONE CORP (BITF-N); LILLEY P C (LILL-I); RAO B R  
(RAOB-I)

Inventor: LILLEY P C; RAO B R

Number of Countries: 106 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040083472	A1	20040429	US 2002419903	P	20021021	200435 B
			US 2003689309	A	20031020	
WO 200438546	A2	20040506	WO 2003US33241	A	20031020	200435
AU 2003284292	A1	20040513	AU 2003284292	A	20031020	200468

Priority Applications (No Type Date): US 2002419903 P 20021021; US  
2003689309 A 20031020

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040083472	A1	11	G06F-009/44	Provisional application	US 2002419903

WO 200438546 A2 E G06F-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL  
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI  
NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG  
UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

AU 2003284292 A1 G06F-009/44 Based on patent WO 200438546

Abstract (Basic): US 20040083472 A1

NOVELTY - A synchronization markup language (SyncML) server  
communicatively coupled to electronic devices comprises an enhanced  
**SyncML device management ( SyncML DM )** server software. A  
**SyncML DM** client which is provided in the electronic device,  
interprets enhancement to **SyncML DM** specifications for updating  
firmware.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the  
following:

- (1) firmware updating method; and
- (2) **synchronization markup language device management**  
interpreter.

USE - For electronic devices e.g. mobile phones and personal  
digital assistant (PDA).

ADVANTAGE - Enables providing enhanced **synchronization markup  
language device management** server to firmware updating service.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
the synchronization mark-up language management system.  
pp; 11 DwgNo 1/2

Title Terms: SYNCHRONISATION; MARK; UP; LANGUAGE; MANAGEMENT; SYSTEM;  
MOBILE; TELEPHONE; SYNCHRONISATION; LANGUAGE; DEVICE; MANAGEMENT; SERVE;  
INTERPRETATION; ENHANCE; SPECIFICATION; UPDATE; FIRMWARE

Derwent Class: T01; W01

International Patent Class (Main): G06F-000/00; G06F-009/44

File Segment: EPI

*applicant*

1/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

015863587 \*\*Image available\*\*  
WPI Acc No: 2004-021418/200402  
XRPX Acc No: N04-016452

**Request generation method for electronic device, involves using address information of nodes in hierarchical tree, to derive request containing node structure identification data**

Patent Assignee: NOKIA CORP (OYNO )  
Inventor: HARTIKAINEN R; SAHINOJA M  
Number of Countries: 100 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030204640	A1	20031030	US 2003422015	A	20030422	200402 B
WO 200394435	A1	20031113	WO 2002IB1441	A	20020430	200402
AU 2002258019	A1	20031117	AU 2002258019	A	20020430	200442
			WO 2002IB1441	A	20020430	

Priority Applications (No Type Date): WO 2002IB1441 A 20020430

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030204640 A1 18 G06F-015/163

WO 200394435 A1 E H04L-012/24

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU  
ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 2002258019 A1 H04L-012/24 Based on patent WO 200394435

Abstract (Basic): US 20030204640 A1

NOVELTY - A request is generated by coding an address information of node selected from a hierarchy tree. The hierarchical structure of nodes related to selected nodes is identified using the additional information in the request. A command is coded for instructing the retrieval and return of management related information.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) device for generating request;
- (2) computer program product for management information handling;
- (3) device for generating response to request;
- (4) software tool for handling management related information.

USE - For generating requests based on synchronous markup language device management ( **SyncML** DM ) protocols, to handle management data objects in electronic devices e.g. mobile phone, personal digital assistant (PDA), mobile computer, electronic notebooks connected to Internet, universal mobile telecommunication system (UMTS) network and wide area network (WAN).

ADVANTAGE - The tree exploring information and filter information are coded effectively thereby management related information is handled easily and perfectly.

DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram illustrating the request generating method.

pp; 18 DwgNo 4/5

Title Terms: REQUEST; GENERATE; METHOD; ELECTRONIC; DEVICE; ADDRESS;  
INFORMATION; NODE; HIERARCHY; TREE; DERIVATIVE; REQUEST; CONTAIN; NODE;  
STRUCTURE; IDENTIFY; DATA

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/163; H04L-012/24

International Patent Class (Additional): G06F-015/00; H04L-029/06

File Segment: EPI

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?t s6/5/1

6/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015544298 \*\*Image available\*\*  
WPI Acc No: 2003-606454/200357  
XRPX Acc No: N03-483484

**Platform-independent software searching and distributing apparatus for mobile telephone, has server loader synchronization markup language processor to transmit data of modified software database to device loader processor**

Patent Assignee: ELECTRONICS & TELECOM RES INST (ELTE-N); HJMOON (HJMO-N); HANJUNGMOON JH (HANJ-N); KOREA ELECTRONICS & TELECOM RES INST (KOEL-N); HAN D W (HAND-I); KIM C K (KIMC-I); PARK J E (PARK-I); SAKONG J (SAKO-I)  
Inventor: HAN D W; KIM C G; PARK J E; SA G J; SAH G J; KIM C K; SAKONG J  
Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030097433	A1	20030522	US 2002108482	A	20020329	200357 B
KR 2003037123	A	20030512	KR 200168230	A	20011102	200358
KR 421624	B	20040311	KR 200168230	A	20011102	200444

Priority Applications (No Type Date): KR 200168230 A 20011102

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030097433	A1		11	G06F-015/16	
KR 2003037123	A			G06F-009/445	
KR 421624	B			G06F-009/445	Previous Publ. patent KR 2003037123

Abstract (Basic): US 20030097433 A1

NOVELTY - An analyzer (21) analyses and detects software information from a web site and downloads software corresponding detected information. A managing unit (22) manages the detected and downloaded software information, as a database. A server loader (30) has synchronization mark language ( **SyncML** ) processor (23) to transmit managed information to **SyncML** processor (25) of device loader (50) based on **SyncML** protocol.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) platform-independent software installing apparatus;
- (2) platform-independent software installing method;
- (3) platform-independent software searching and distributing method;
- (4) computer readable recorded medium storing software searching and distributing program; and
- (5) computer readable recorded medium storing software installing program.

USE - For searching and distributing platform-independent software to mobile telephone, personal digital assistant (PDA) and handheld personal computer (HPC).

ADVANTAGE - By using server loader and device loader for automatically monitoring web sites, valuable software is provided and the program is automatically downloaded and installed to the mobile devices, thus improves software management efficiency. As **SyncML** is used as data synchronization standard for installing and renewing software, between server loader and device loader, the software is efficiently provided to various types of mobile devices with heterogeneous operating system.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of platform-independent software searching and distributing apparatus.

analyzer (21)  
managing unit (22)  
**SyncML** processors (23,25)  
server loader (30)  
device loader (50)  
pg; 11 DwgNo 2/4

Title Terms: PLATFORM; INDEPENDENT; SOFTWARE; SEARCH; DISTRIBUTE; APPARATUS  
; MOBILE; TELEPHONE; SERVE; LOAD; SYNCHRONISATION; LANGUAGE; PROCESSOR;  
TRANSMIT; DATA; MODIFIED; SOFTWARE; DATABASE; DEVICE; LOAD; PROCESSOR

Derwent Class: T01; W01

International Patent Class (Main): G06F-009/445; G06F-015/16

File Segment: EPI

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?t s8/5/1-5

8/5/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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016434232 \*\*Image available\*\*  
WPI Acc No: 2004-592149/200457  
XRPX Acc No: N04-468335

Wireless communication system for downloading digital data files to portable computing devices, permits wireless download access to digital content by portable device within communication range of at least one wireless access point

Patent Assignee: SBC PROPERTIES LP (SBCP-N); SBC KNOWLEDGE VENTURES LP (SBCK-N)

Inventor: GRANNAN M; PATRON D; SURYANARAYANA L  
Number of Countries: 108 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040143652	A1	20040722	US 2003346722	A	20030117	200457 B
WO 200468321	A2	20040812	WO 2004US552	A	20040111	200457

Priority Applications (No Type Date): US 2003346722 A 20030117

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20040143652	A1	10	G06F-015/16	
WO 200468321	A2 E		G06F-000/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20040143652 A1

NOVELTY - A sign-on server (108) in the central facility (102), permits wireless download access to digital data files by portable devices (124,134) within communication range of at least one of the wireless access points (122,132). A digital data file download status memory (110) indicates the download status and downloaded portion of the file.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for method of downloading digital data files to portable computing devices.

USE - For downloading digital data files such as content of digital versatile disk (DVD), compact disk (CD) or software files, to portable devices within communication range of wireless access points such as music store, coffee shop.

ADVANTAGE - Supports seamless download of requested digital data file when wireless subscribers roam between various locations that are supported by a federation of different wireless networks with a centralized user authentication capability.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram of the wireless communication system for downloading digital data files.

central facility (102)  
sign-on server (108)  
digital data file download status memory (110)  
wireless access points (122,132)  
portable computing devices (124,134)  
pp; 10 DwgNo 1/5

Title Terms: WIRELESS; COMMUNICATE; SYSTEM; DIGITAL; DATA; FILE; PORTABLE; COMPUTATION; DEVICE; PERMIT; WIRELESS; ACCESS; DIGITAL; CONTENT; PORTABLE ; DEVICE; COMMUNICATE; RANGE; ONE; WIRELESS; ACCESS; POINT

Derwent Class: T01; T05; W01; W04

International Patent Class (Main): G06F-000/00; G06F-015/16

International Patent Class (Additional): G06F-015/173

File Segment: EPI

8/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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016292032 \*\*Image available\*\*  
WPI Acc No: 2004-449927/200442  
XRPX Acc No: N04-356068

**Management object priority determining method for device management system, involves determining data unit having priority data of one sub-object in relation to other sub-objects and attaching data unit to management tree**

Patent Assignee: NOKIA CORP (OYNO )  
Inventor: KAAPPA E; LAHTI J  
Number of Countries: 107 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200446952	A1	20040603	WO 2003FI890	A	20031119	200442 B
US 20040123241	A1	20040624	US 2003718130	A	20031120	200442
FI 200202079	A	20040522	FI 20022079	A	20021121	200447
AU 2003283448	A1	20040615	AU 2003283448	A	20031119	200470

Priority Applications (No Type Date): FI 20022079 A 20021121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200446952	A1	E	21	G06F-015/177	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
US 20040123241	A1			G06F-017/21	
FI 200202079	A			G06F-015/177	
AU 2003283448	A1			G06F-015/177	Based on patent WO 200446952

Abstract (Basic): WO 200446952 A1

NOVELTY - The method involves determining contents of sub-objects included in a management object of a management tree. A data unit having a priority data of a sub-object in relation to other sub-object is determined in a management server. The data unit is attached to the tree. A file definition based on the tree is sent to a management customer device that. The file definition is disassembled into management tree form.

DETAILED DESCRIPTION - Determination is in accordance with **synchronization markup language ( SyncML )**.

INDEPENDENT CLAIMS are also included for the following:

- (a) a device management system
- (b) an electronic device arranged to operate as a server of device management
- (c) an electronic device arranged to operate as a customer device of device management
- (d) a computer **software** product loadable into a memory of a data processing device, which when performed in a processor performs a method of determining priority of a management object.

USE - Used for determining the priority of a management object comprising wireless application protocol (WAP) provisioning settings for a Bootstrap process, in a device management system (claimed) for a device e.g. mobile telephone, portable computer.

ADVANTAGE - The method allows disassembling of problematic management objects and placing the parameter sets and attributes as management objects into the management tree thus taking into account priorities among the management objects. The method avoids the need of checking the management customer device, whether the management objects are placed in the management tree in the correct order.

DESCRIPTION OF DRAWING(S) - The drawing shows a method of for determining the priority of a management object in a device management system.

pp; 21 DwgNo 4/5

Title Terms: MANAGEMENT; OBJECT; PRIORITY; DETERMINE; METHOD; DEVICE; MANAGEMENT; SYSTEM; DETERMINE; DATA; UNIT; PRIORITY; DATA; ONE; SUB; OBJECT; RELATED; SUB; OBJECT; ATTACH; DATA; UNIT; MANAGEMENT; TREE

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/177; G06F-017/21

International Patent Class (Additional): H04L-012/24

File Segment: EPI

8/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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016157973 \*\*Image available\*\*

WPI Acc No: 2004-315860/200429

XRPX Acc No: N04-251677

**Management object addressing method e.g. for subtree in synchronization markup language device, involves coding portion of content of data element using coding algorithm, and assigning coded portion as identifier for addressing object**

Patent Assignee: NOKIA CORP (OYNO )

Inventor: KAAPPA E; SAHINOJA M

Number of Countries: 106 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200427634	A1	20040401	WO 2003FI688	A	20030919	200429 B
FI 200201683	A	20040321	FI 20021683	A	20020920	200433
US 20040109454	A1	20040610	US 2003665878	A	20030919	200438
AU 2003262611	A1	20040408	AU 2003262611	A	20030919	200462

Priority Applications (No Type Date): FI 20021683 A 20020920

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200427634	A1	E	22	G06F-015/16	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

FI 200201683	A	G06F-015/177
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US 20040109454	A1	H04L-012/28
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AU 2003262611	A1	G06F-015/16	Based on patent WO 200427634
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Abstract (Basic): WO 200427634 A1

NOVELTY - The method involves coding a portion of the content of a predetermined data element, retrieved from information in the management object, using a prescribed coding algorithm. The portion of the content of the data element in the coded form is assigned as an identifier for addressing the management object.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) device management system;
- (2) electronic device; and
- (3) **computer program** product for addressing a management object.

USE - For addressing a management object such as a single parameter, subtree or a data collection in a device management system (claimed) e.g. for **synchronization markup language ( SyncML )** device.

ADVANTAGE - The addressing of the management object is implemented both in a management server and management client, with same identifier

defined for management object in both devices, thus eliminating errors due to naming carried out in different ways.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart explaining the management object addressing process.

pp; 22 DwgNo 4/5

Title Terms: MANAGEMENT; OBJECT; ADDRESS; METHOD; SYNCHRONISATION; LANGUAGE; DEVICE; CODE; PORTION; CONTENT; DATA; ELEMENT; CODE; ALGORITHM; ASSIGN; CODE; PORTION; IDENTIFY; ADDRESS; OBJECT

Derwent Class: T01

International Patent Class (Main): G06F-015/16; G06F-015/177; H04L-012/28

International Patent Class (Additional): H04L-012/24; H04L-029/06

File Segment: EPI

8/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015884007 \*\*Image available\*\*

WPI Acc No: 2004-041841/200404

XRPX Acc No: N04-033837

**Telecommunication and computing devices synchronizing method for businessperson, involves detecting use of data component and setting data component in one client data store with respect to another**

Patent Assignee: NOKIA CORP (OYNO ); NOKIA INC (OYNO )

Inventor: KIISKINEN A

Number of Countries: 103 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030217181	A1	20031120	US 2002153170	A	20020520	200404 B
WO 200398470	A1	20031127	WO 2003IB1864	A	20030513	200404
AU 2003227998	A1	20031202	AU 2003227998	A	20030513	200442

Priority Applications (No Type Date): US 2002153170 A 20020520

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 20030217181	A1		13	G06F-015/16	
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WO 200398470	A1	E		G06F-017/30	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003227998	A1			G06F-017/30	Based on patent WO 200398470
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Abstract (Basic): US 20030217181 A1

NOVELTY - The method involves forming structure information of two client data stores (10c, 11c) in respect to one data component e.g. field of record of one client store for which the other store does not have any data components. The use of a data component in one client data store is detected and a corresponding data component is set in the client store with respect to the other client store.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a system for synchronizing telecommunication and computing devices

(b) a **computer program** for providing instruction to a telecommunication device.

USE - Used for synchronizing telecommunication e.g. Universal Mobile Telecommunications System (UMTS) Radio Access Network (UTRAN) and the Internet and computing devices for a businessperson.

ADVANTAGE - The method does not alert the problem in one device to the other until the occurrence of the actual use, hence the user is not unnecessarily burdened by having to take care of mapping problems before the actual occurrence.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of two clients and a server exchanging **synchronization mark up language** messages and indicating a sync field scanner operation in association with a server sync agent of the server.

Client data stores (10c, 11c)

Server data store (12c)

Sync adapter (12e)

Sync field scanner (12g)

pp; 13 DwgNo 1/3

Title Terms: TELECOMMUNICATION; COMPUTATION; DEVICE; SYNCHRONISATION;  
METHOD; DETECT; DATA; COMPONENT; SET; DATA; COMPONENT; ONE; CLIENT; DATA;  
STORAGE; RESPECT

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/16; G06F-017/30

File Segment: EPI

8/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015771786 \*\*Image available\*\*

WPI Acc No: 2003-833988/200377

XRPX Acc No: N03-666683

**Synchronization information handling method for electronic device e.g. pager, involves coding synchronization related information if it includes uncoded information, and transmitting information to communication component**

Patent Assignee: NOKIA CORP (OYNO )

Inventor: MARTIKAINEN M; PAJUSAARI S; RAPAKKO J

Number of Countries: 100 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200388613	A1	20031023	WO 2002IB1203	A	20020415	200377 B
US 20030212826	A1	20031113	US 2003411074	A	20030409	200382
AU 2002251417	A1	20031027	AU 2002251417	A	20020415	200436
			WO 2002IB1203	A	20020415	

Priority Applications (No Type Date): WO 2002IB1203 A 20020415

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200388613 A1 E 33 H04L-029/06

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU  
ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20030212826 A1 G06F-015/16

AU 2002251417 A1 H04L-029/06 Based on patent WO 200388613

Abstract (Basic): WO 200388613 A1

NOVELTY - The method involves receiving synchronization related information from an application by a synchronization manager (120), and coding the information if it includes uncoded information. The information is transmitted to a communication component. If the received information includes coded related information the information is transmitted to the communication component.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) a **computer program** for handling synchronization information
- (b) an apparatus for handling synchronization information.

USE - Used for handling synchronization information of application running on an electronic device e.g. mobile phone, pager and laptop computer.

ADVANTAGE - The method helps to use several different specialized synchronization encoder/decoders on the same platform independently.

. . The method provides a concept to use the synchronization related components for communicating synchronization data between the participation devices, without employing the coding/decoding component features.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of an apparatus for offering synchronization document handling.

Synchronization wrapper (110)

Synchronization manager (120)

Synchronization interface (135)

Communication adapters (140,141,142)

pp; 33 DwgNo 3/4

Title Terms: SYNCHRONISATION; INFORMATION; HANDLE; METHOD; ELECTRONIC;  
DEVICE; PAGE; CODE; SYNCHRONISATION; RELATED; INFORMATION; INFORMATION;  
TRANSMIT; INFORMATION; COMMUNICATE; COMPONENT

Derwent Class: W01

International Patent Class (Main): G06F-015/16; H04L-029/06

International Patent Class (Additional): G06F-017/30; G06F-017/60;  
H04L-007/00

File Segment: EPI

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Set	Items	Description
S1	2	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE) () (DM OR DEVICE()MAN- AGE?)
S2	28	(SYNCML OR SYNC()ML OR SYNCHRONI?() (MARKUP OR MARK()UP) () L- ANGUAGE OR OMA OR OPEN()MOBILE()ALLIANCE)
S3	31173	SOFTWARE OR FIRMWARE OR SOFT()WARE OR FIRM()WARE OR COMPUT- ER (1W) PROGRAM? OR COMPUTER ()READABLE() (MEDIA OR MEDIUM) OR DEVICE()DRIVER?
S4	4044	UPDATE? ? OR UPDATING OR UP(1W)DATE
S5	1	S2 AND S3(5N)S4

?show files

File 256:TecInfoSource 82-2004/Dec

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5/5/1

DIALOG(R) File 256:TecInfoSource  
(c) 2004 Info.Sources Inc. All rts. reserv.

00132565 DOCUMENT TYPE: Review

PRODUCT NAMES: EasySync for Notes (065811); TrueSync (717487);  
IntelliSync (670219)

TITLE: Untethered and In Sync: Keeping the information on your  
company's...

AUTHOR: Cohn, Michael

SOURCE: Internet World, v7 n15 p46(2) Aug 1, 2001

ISSN: 1097-8291

HOME PAGE: <http://www.iw.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

Synchrologic, Lotus, Starfish Software, Pumatech, and FusionOne are delivering synchronization **software** to users, simplifying the **updating** of enterprise information. For example insurance company USAllianz taps Synchrologic **software** for **updating** its customer contacts and maintaining marketing campaigns. The company runs up to 20 synchronizations daily, updating information on a wide range of hardware. Consulting firm Luminant uses Lotus's Mobile Notes and EasySync for Notes to update e-mail and calendars of field agents. Motorola subsidiary Starfish Software offers users software that syncs a wide range of devices, including pagers, to desktop computers. The vendor also is part of the 640-member **SyncML** consortium, which is developing synchronization standards. **SyncML** standards should be applied to devices by the end of 2001. Pumatech also offers synchronization software. Its Intellisync tool works with Mind-It software. It also is used in Research In Motion's BlackBerry device. FusionOne offers users synchronization for both wireless and desktop hardware. Other synchronization companies include Nexthaus, manufacturer of SyncSuite; Solid; Palm, with its HotSync tool; and Microsoft, with its Pocket PC-based ActiveSync.

COMPANY NAME: IBM Lotus software (254975); Intellisync Corp (603139)

DESCRIPTORS: File Transfer; Groupware; Handhelds & Palmtops; Mobile  
Computing; Notes/Domino; Remote Network Access

REVISION DATE: 20040627

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?t sl/5/1-2

1/5/1

DIALOG(R)File 256:TecInfoSource  
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01155349 DOCUMENT TYPE: Product

**PRODUCT NAME: WebSphere Micro Environment 5.5 (155349)**

IBM Corp (351245)  
1133 Westchester Ave  
White Plains, NY 10604 United States  
TELEPHONE: (914) 499-1900

RECORD TYPE: Directory

CONTACT: Sales Department

IBM's WebSphere Micro Environment 5.5 provides mobile-device users with access to e-business applications. The system includes new just-in-time (JIT) and ahead-of-time (AOT) compilation options. Its beta implementation of the Personal Profile (JSR 062) allows developers to employ Abstract Windowing Toolkit (AWT) user interface controls in PDA applications. WebSphere Micro Environment 5.5 now runs on Microsoft (R) Windows (R) CE 3.0, Windows Powered SmartPhone 2002, PocketPC 2002 Phone Edition, Rex, and QUALCOMM (R) BREW. It also supports QNX (R), MontaVista (R) Linux, OSE, and ITRON embedded device platform products. The system includes a beta version of a **SyncML / DM** client, written with the Connected, Limited Device Configuration, or CLDC (TM). The feature supports over-the-air (OTA) handset application synchronization. WebSphere Micro Environment employs the J9 virtual machine, which implements a configurable architectural layer. The J9 layer operates as a common interface for multiple applications, regardless of device hardware or operating system.

DESCRIPTORS: Application Servers; Embedded Systems; Mobile Computing;  
Program Development

HARDWARE: Cell Phones; IBM PC & Compatibles; Palm; Pocket PC; Sun; Thin Clients; UNIX

OPERATING SYSTEM: Linux; Palm OS; QNX; Solaris; WebSphere; Windows; Windows CE; Windows Mobile

PROGRAM LANGUAGES: Java

TYPE OF PRODUCT: Mini; Micro; Workstation

POTENTIAL USERS: Embedded Systems Developers

PRICE: Available upon request; Internet trial available

REVISION DATE: 20030525

1/5/2

DIALOG(R)File 256:TecInfoSource  
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00144575 DOCUMENT TYPE: Review

**PRODUCT NAMES: DB2 Everyplace 8.1 (152277); WebSphere Studio Device Developer (152285)**

**TITLE: Year-End Surge in IBM Embedded Tools, Runtimes**  
**AUTHOR: Correia, Edward J**  
**SOURCE: SD Times, v70 p13(1) Jan 15, 2003**  
**ISSN: 1528-1965**  
**HOME PAGE: <http://www.sdtimes.com>**

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

IBM's DB2 Everyplace, WebSphere Studio Device Developer and Micro Environment, and Microsoft's Active Sync are highlighted in this discussion of the state of embedded tools from IBM to be released at the end of 2002. The DB2 Everyplace mobile database environment has been enhanced with table-level encryption and released WebSphere Studio Device Developer and Micro Environment 5.0, an update to the mobile application development and runtime environment. Support is provided for Palm OS and ARM targets, and IBM has added runtimes for Microsoft and QUALCOMM platforms. Also among important enhancements to Device Developer and Micro Environment is **SyncML device management**. SyncML provides a new method for provisioning devices, and configuration and application inventory. With a **SyncML DM**-compliant agent on the device, the user need not provision software to a device, because only a SyncML server is required. The SyncML Initiative, a multivendor effort to create a standard data exchange method for mobile devices, became part of the Open Mobile Alliance. Device Developer and Micro Environment 5 also adds ahead-of-time compiling for ARM targets and will start to debut MIDP 2.0 support early in 2003. Among other products highlighted is WebSphere Studio Device Developer 5.0, which now adds Windows CE 3.0, Pocket PC 2002 Phone Edition, and QUALCOMM's BREW to its list of runtimes.

COMPANY NAME: IBM Corp (351245)

DESCRIPTORS: DB2; Embedded Systems; Handhelds & Palmtops; IBM; Program Development

REVISION DATE: 20030430

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Set	Items	Description
S1	4	AU='RAO, BINDU RAMA'
S2	13	AU='RAO, B. R.'
S3	0	AU='LILLEY, P. C.'
S4	17	S1:S2
S5	0	S4 AND (SYNCLM OR SYNCHRONI?()MARKUP()LANGUAGE?)
S6	4	S1
S7	2	RD (unique items)

?show files

File 35:Dissertation Abs Online 1861-2004/Dec  
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File 65:Inside Conferences 1993-2004/Dec W4  
(c) 2004 BLDSC all rts. reserv.

File 148:Gale Group Trade & Industry DB 1976-2004/Jan 03  
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File 2:INSPEC 1969-2004/Dec W2  
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File 16:Gale Group PROMT(R) 1990-2004/Jan 03  
(c) 2004 The Gale Group

File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 03  
(c) 2004 The Gale Group

File 624:McGraw-Hill Publications 1985-2004/Dec 28  
(c) 2004 McGraw-Hill Co. Inc

File 275:Gale Group Computer DB(TM) 1983-2004/Jan 03  
(c) 2004 The Gale Group

File 674:Computer News Fulltext 1989-2004/Dec W2  
(c) 2004 IDG Communications

File 9:Business & Industry(R) Jul/1994-2004/Dec 30  
(c) 2004 The Gale Group

File 610:Business Wire 1999-2005/Jan 03  
(c) 2005 Business Wire.

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

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?t s7/5/1-2

7/5/1 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

08234397 SUPPLIER NUMBER: 17468108

**Distributed applications? Don't forget the database. (essential database component for interactive applications) (includes related article on video-on-demand) (Technology Information)**

**Rao, Bindu Rama**

Data Communications, v24, n14, p113(5)

Oct, 1995

ISSN: 0363-6399 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: Network managers work to meet the bandwidth demands of multimedia and interactive applications, but the importance of databases that are capable of the complex storage and retrieval tasks associated with large-scale interactive applications also need to be considered. These databases should provide high-speed data access and real-time high-volume transaction processing. To attain these goals, network managers need to understand the database as well as the data access architectures that will facilitate multimedia access. Multimedia applications must coordinate a variety of variables, such as object-oriented databases, broadband access, throughput requirements for next-generation applications, varied traffic flows and storage needs. Multimedia traffic can follow either continuous media or transaction processing applications, but network variables influence effective traffic flow.

SPECIAL FEATURES: illustration; table; chart

INDUSTRY CODES/NAMES: TELC Telecommunications

DESCRIPTORS: Distributed data bases--Usage; Computer software industry--Products

PRODUCT/INDUSTRY NAMES: 7372420 (Database Mgmt Software Pkgs (Micro))

SIC CODES: 7372 Prepackaged software

FILE SEGMENT: CD File 275

7/5/2 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

08149899 SUPPLIER NUMBER: 17463561

**Making the most of middleware. (remote procedure calls and message-oriented middleware) (Tutorial)**

**Rao, Bindu Rama**

Data Communications, v24, n12, p89(5)

Sep, 1995

DOCUMENT TYPE: Tutorial ISSN: 0363-6399 LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT: Network managers who need to keep distributed applications from bogging down the network should examine the underlying communications protocols. Managers should understand the differences between request-reply and peer-to-peer protocols that are employed by middleware applications to facilitate communications between clients and remote servers. This understanding will make it possible to project performance with remote procedure call (RPC)-based products. The network manager can also make plans for implementing messaging middleware applications. These applications provide message delivery and dynamic rerouting capabilities that will help avoid service interruptions and make it easier to balance loads than with RPC-based systems.

SPECIAL FEATURES: illustration; table; chart

INDUSTRY CODES/NAMES: TELC Telecommunications

DESCRIPTORS: Client/server architecture--Usage

FILE SEGMENT: CD File 275

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?ds

Set	Items	Description
S1	17	AU='RAO BINDU RAMA'
S2	30	AU='RAO B R'
S3	2	AU='LILLEY PATRICK C'
S4	47	S1:S3
S5	4	S4 AND (SYNCML OR SYNCHRONIZED()MARKUP()LANGUAGE)

?show files

File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)  
(c) 2004 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2004/Dec W03  
(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20041230,UT=20041223  
(c) 2004 WIPO/Univentio

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200482  
(c) 2004 Thomson Derwent

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?t s5/5/1-4

5/5/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01754758

**SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT  
FIRMWARE UPDATES**

**SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN  
ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE  
MICROLOGICIEL**

PATENT ASSIGNEE:

Bitfone Corporation, (4844510), 32451 Golden Lantern, Suite 301, Laguna  
Niguel, CA 92677, (US), (Applicant designated States: all)

INVENTOR:

**RAO, Bindu, Rama** , 21 Henley Drive, Laguna Niguel, CA 92677, (US)

**LILLEY, Patrick, C.** , 17 Parma, Irvine, CA 92602, (US)

PATENT (CC, No, Kind, Date):

WO 2004038546 040506

APPLICATION (CC, No, Date): EP 2003776472 031020; WO 2003US33241 031020

PRIORITY (CC, No, Date): US 419903 P 021021

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;

HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: G06F-001/00

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 040630 A2 International application. (Art. 158(1))

Application: 040630 A2 International application entering European  
phase

LANGUAGE (Publication,Procedural,Application): English; English; English

5/5/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

01127055 \*\*Image available\*\*

**SOFTWARE SELF-REPAIR TOOLKIT FOR ELECTRONIC DEVICES**

**BOITE A OUTILS D'AUTOREPARATION DE LOGICIELS POUR DISPOSITIFS ELECTRONIQUES**

Patent Applicant/Assignee:

BITFONE CORPORATION, 32451 Golden Lantern, Suite 301, Laguna Niguel, CA  
92677, US, US (Residence), US (Nationality)

Inventor(s):

**RAO Bindu Rama** , 21 Henley Drive, Laguna Niguel, CA 92677, US,

CHIA Teck, 2333 City Lights Drive, Aliso Viejo, CA 92656, US,

OKONNEN Harri, 2 Sea Terrace, Dana Point, CA 92629, US

Legal Representative:

BORG Kevin E (agent), McAndrews, Held & Malloy, Ltd., 500 West Madison  
Street, Suite 3400, Chicago, IL 60661, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200449104 A2 20040610 (WO 0449104)

Application: WO 2003US35934 20031112 (PCT/WO US03035934)

Priority Application: US 2002428071 20021121

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK

LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC

SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F

Publication Language: English

Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 7615

#### English Abstract

A device and method supporting the identification and correction of firmware and/or software errors is described. Upon the occurrence of a firmware/software error or exception, an embodiment in accordance with the present invention may gather parameters for identifying the error or exception, and the execution environment in which the error occurred, and may communicate the parameters or an identifier to a server, to retrieve update information for correcting the firmware/software error or exception. The execution environment may be single or multi-threaded, and may be a java virtual machine. The device may restart/reboot during the update process, and may log an error if update information is not available to correct the error or exception. The device may communicate the error log information to the server via the communication network. The communication network may be a wireless network.

#### French Abstract

La presente invention a trait a un dispositif et un assurant l'identification et la correction d'erreurs de micrologiciels et/ou de logiciels. Lors de la survenance d'une erreur ou exception de micrologiciels et/ou de logiciels, un mode de realisation selon la presente invention peut regrouper des parametres permettant l'identification de l'erreur ou de l'exception, et l'environnement d'execution ou l'erreur s'est produite, et peut communiquer les parametres ou un identifiant au serveur, pour l'extraction d'information de mise a jour en vue de la correction de l'erreur ou de l'exception de micrologiciels et/ou de logiciels. L'environnement d'execution peut etre a filiere unique ou a filieres multiples, et etre une machine virtuelle de Java. Le dispositif peut etre redemarre/reinitialise lors du procede de mise a jour, et peut effectuer une inscription d'erreur si l'information de mise a jour n'est pas disponible pour la correction de l'erreur ou de l'exception. Le dispositif peut communiquer l'information d'inscription d'erreur au serveur via le reseau de communication. Le reseau de communication peut etre un reseau sans fil.

Legal Status (Type, Date, Text)

Publication 20040610 A2 Without international search report and to be republished upon receipt of that report.

5/5/3 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2004 WIPO/Univentio. All rts. reserv.

01116509 \*\*Image available\*\*

**SYSTEM WITH REQUIRED ENHANCEMENTS TO SYNCML DM ENVIRONMENT TO SUPPORT FIRMWARE UPDATES**

**SYSTEME DANS LEQUEL DES AMELIORATIONS REQUISES ONT ETE APPORTEES A UN ENVIRONNEMENT SYNCML DM SERVANT A SUPPORTER DES MISE A JOUR DE MICROLOGICIEL**

Patent Applicant/Assignee:

BITFONE CORPORATION, 32451 Golden Lantern, Suite 301, Laguna Niguel, CA 92677, US, US (Residence), US (Nationality)

Inventor(s):

RAO Bindu Rama , 21 Henley Drive, Launa Nigel, CA 92677, US,

LILLEY Patrick C , 17 Parma, Irvine, CA 92602, US

Legal Representative:

BORG Kevin E (agent), McAndrews, Held & Malloy, Ltd., 500 West Madison Street, Suite 3400, Chicago, IL 60661, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200438546 A2 20040506 (WO 0438546)

Application: WO 2003US33241 20031020 (PCT/WO US03033241)

Priority Application: US 2002419903 20021021

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC  
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE  
SI SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: G06F

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6138

English Abstract

A system for employing **SyncML** DM for updating firmware in mobile handsets and other devices. The system employs enhancements to **SyncML** DM specifications. A **SyncML** management client employs new commands, specified by the present invention, for retrieving update packages for firmware updates, for the verification of a received update package, the command for saving the update package in an appropriate management object, the command for initiating an update process by an update agent and the command for the subsequent notification of the results of processing by the update agent (success, failure, etc.). More specifically, the **SyncML** DM management client employs new commands, specified by the present invention, for retrieving update packages for firmware updates and for updating the firmware selectively based on appropriateness, security and authentication, employing fault tolerant means.

French Abstract

L'invention concerne un systeme utilisant la **SyncML** DM pour mettre a jour des micrologiciels dans des combines sans fil ou d'autres dispositifs. Ce systeme utilise des ameliorations apportees a des specifications **SyncML** DM. Un client de gestion **SyncML** utilise de nouvelles commandes, specifiees par la presente invention, pour recuperer des programmes de mise a jour de micrologiciel, pour verifier un programme de mise a jour recu, pour enregistrer le programme de mise a jour dans un objet de gestion approprie, pour initier un processus de mise a jour par un agent de mise a jour et pour la notification ulterieure des resultats du processus par l'agent de mise a jour (succes, echec, etc.). De facon plus specifique, le client de gestion **SyncML** DM utilise de nouvelles commandes, specifiees par la presente invention, pour recuperer des programmes de mise a jour de micrologiciel et pour mettre a jour le micrologiciel de facon selective sur la base de la pertinence, de la securite et de l'authentification, a l'aide de moyens a tolerance de panne.

Legal Status (Type, Date, Text)

Publication 20040506 A2 Without international search report and to be republished upon receipt of that report.

5/5/4 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

016216710 \*\*Image available\*\*

WPI Acc No: 2004-374598/200435

XRPX Acc No: N04-298044

Synchronization mark-up language management system for mobile phone, has synchronization markup language device management server for interpreting



enhancement to SyncML DM specifications for updating firmware  
Patent Assignee: BITFONE CORP (BITF-N); LILLEY P C (LILL-I); RAO B R  
(RAOB-I)

Inventor: LILLEY P C; RAO B R

Number of Countries: 106 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040083472	A1	20040429	US 2002419903	P	20021021	200435 B
			US 2003689309	A	20031020	
WO 200438546	A2	20040506	WO 2003US33241	A	20031020	200435
AU 2003284292	A1	20040513	AU 2003284292	A	20031020	200468

Priority Applications (No Type Date): US 2002419903 P 20021021; US  
2003689309 A 20031020

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20040083472	A1	11	G06F-009/44	Provisional application US 2002419903

WO 200438546 A2 E G06F-000/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL  
IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI  
NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG  
UZ VC VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB  
GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ  
UG ZM ZW

AU 2003284292 A1 G06F-009/44 Based on patent WO 200438546

Abstract (Basic): US 20040083472 A1

NOVELTY - A synchronization markup language ( **SyncML** ) server  
communicatively coupled to electronic devices comprises an enhanced  
**SyncML** device management ( **SyncML** DM) server software. A **SyncML** DM  
client which is provided in the electronic device, interprets  
enhancement to **SyncML** DM specifications for updating firmware.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the  
following:

(1) firmware updating method; and

(2) synchronization markup language device management interpreter.

USE - For electronic devices e.g. mobile phones and personal  
digital assistant (PDA).

ADVANTAGE - Enables providing enhanced synchronization markup  
language device management server to firmware updating service.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
the synchronization mark-up language management system.

pp; 11 DwgNo 1/2

Title Terms: SYNCHRONISATION; MARK; UP; LANGUAGE; MANAGEMENT; SYSTEM;  
MOBILE; TELEPHONE; SYNCHRONISATION; LANGUAGE; DEVICE; MANAGEMENT; SERVE;  
INTERPRETATION; ENHANCE; SPECIFICATION; UPDATE; FIRMWARE

Derwent Class: T01; W01

International Patent Class (Main): G06F-000/00; G06F-009/44

File Segment: EPI

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Set	Items	Description
S1	18	BITFONE AND (SOFTWARE OR FIRMWARE) AND SYNCML
S2	9	RD (unique items)
S3	2	S2 NOT PY>2002

?show files

File 16:Gale Group PROMT(R) 1990-2005/Jan 04  
(c) 2005 The Gale Group  
File 20:Dialog Global Reporter 1997-2005/Jan 03  
(c) 2005 The Dialog Corp.  
File 148:Gale Group Trade & Industry DB 1976-2004/Jan 03  
(c)2004 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2005/Jan 04  
(c) 2005 The Gale Group  
File 348:EUROPEAN PATENTS 1978-2004/Dec W03  
(c) 2004 European Patent Office  
File 349:PCT FULLTEXT 1979-2002/UB=20041230,UT=20041223  
(c) 2004 WIPO/Univentio  
File 610:Business Wire 1999-2005/Jan 03  
(c) 2005 Business Wire.  
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jan 04  
(c) 2005 The Gale Group  
File 636:Gale Group Newsletter DB(TM) 1987-2005/Jan 04  
(c) 2005 The Gale Group  
File 647:CMP Computer Fulltext 1988-2005/Dec W3  
(c) 2005 CMP Media, LLC  
File 649:Gale Group Newswire ASAP(TM) 2005/Dec 27  
(c) 2005 The Gale Group  
File 990:NewsRoom Current Sep 1 -2005/Jan 03  
(c) 2005 The Dialog Corporation  
File 992:NewsRoom 2003  
(c) 2004 The Dialog Corporation  
File 993:NewsRoom 2002  
(c) 2004 The Dialog Corporation  
?t s3/3,k/1-2

3/3,K/1 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2005 The Gale Group. All rts. reserv.

09452831 Supplier Number: 83067473 (USE FORMAT 7 FOR FULLTEXT)  
**Six Nokia Venture Partners Funded Companies Report Milestones at 3GSM World Congress.**  
Business Wire, p2004  
Feb 20, 2002  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 769

... latest developments at the 3GSM World Congress in Cannes.

At the event, Avesair, Avian Communications, **Bitfone**, Enition, fusionOne and WaveMarket will unveil their latest milestones, products and new features for the...

...mobile technology companies targeting high growth market opportunities, such as mobile and IP network and **software** infrastructure. Nokia Venture Partners maintains USD \$650 million under management and has funded more than 30 companies within the mobile infrastructure hardware and **software**, applications and services sectors, from the US, the UK, Germany and Finland. The companies participating...

...new revenue streams for operators, through the use of real-time value based billing models.

**Bitfone** Corporation, provider of innovative **software** solutions that enables carriers and mobile phone manufacturers to reduce costs and increase revenue by enhancing the user experience, introduces its new mProve solution, the world's first carrier-grade **software** infrastructure for delivering over-the-air **firmware** and **software** updates to mobile

?ds

Set	Items	Description
S1	26	CO='INSIGNIA':CO='INSIGNIA SYSTEMS IN'
S2	1	CO='INNOPATH SOFTWARE'
S3	6	CO='MFORMATION':CO='MFORMATION TECHNOLOGIES INC'
S4	40	CO='STARFISH SOFTWARE INC'
S5	73	S1:S4
S6	0	S5 AND (FIRMWARE OR SOFTWARE) AND (SYNCML OR OMA)
S7	0	S5 AND (SYNCML OR OMA)
S8	0	S5 AND (SYNCHRONI?())(MARKUP OR MARK()UP)()LANGUAGE?)
S9	0	S5 AND (OPEN()MOBILE()ALLIANCE)

?show files

File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)

(c) 2004 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2004/Dec W03

(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20041230,UT=20041223

(c) 2004 WIPO/Univentio

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200482

(c) 2004 Thomson Derwent

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phones.

Enition, provider of the innovative, secure and scalable Internet Monetization Platform...

...release of its flagship NetToll product.

fusionOne, a leader in carrier-class mobility and synchronization **software**, announces the expansion of its award-winning sync platform to include Over-the-Air (OTA) **SyncML**-based solutions. fusionOne's new OTA Sync Solutions enable carriers to offer their subscribers the ability to wirelessly sync **SyncML** handsets and PDAs with PIM and network applications.

WaveMarket, provider of a breakthrough spatio-temporal...

...reveals its first round of venture funding for the company and announces its Wave IQ **software** that significantly outperforms existing GIS and relational databases.

To register for press credentials for the...

...around the world. The fund is backed by a number of limited partners, including BMC **Software**, Goldman Sachs, Nokia and others, and has a strong track record of leveraging its combined...

3/3,K/2 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter

(c) 2005 The Dialog Corp. All rts. reserv.

21355783 (USE FORMAT 7 OR 9 FOR FULLTEXT)

NOKIA: Six Nokia Venture Partners Funded companies report milestones at 3GSM World Congress

M2 PRESSWIRE

February 20, 2002

JOURNAL CODE: WMPR LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 745

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... latest developments at the 3GSM World Congress in Cannes. At the event, Avesair, Avian Communications, **Bitfone**, Enition, fusionOne and WaveMarket will unveil their latest milestones, products and new features for the...

... mobile technology companies targeting high growth market opportunities, such as mobile and IP network and **software** infrastructure. Nokia Venture Partners maintains USD \$650 million under management and has funded more than 30 companies within the mobile infrastructure hardware and **software**, applications and services sectors, from the US, the UK, Germany and Finland. The companies participating...

... new revenue streams for operators, through the use of real-time value based billing models.

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WaveMarket, provider of a breakthrough spatio-temporal...

...reveals its first round of venture funding for the company and announces its Wave IQ **software** that significantly outperforms existing GIS and relational databases.

To register for press credentials for the...

... around the world. The fund is backed by a number of limited partners, including BMC **Software**, Goldman Sachs, Nokia and others, and has a strong track record of leveraging its combined...

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